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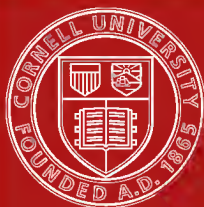
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DENMARK AND THE DANES



Frontispiece.]

Georg Brandes.

[Photo : Elliott & Fry, London.]

DENMARK AND THE DANES

A SURVEY OF DANISH LIFE,
INSTITUTIONS AND CULTURE

BY
WILLIAM J. HARVEY AND CHRISTIAN REPPIEN

WITH A MAP AND 32 ILLUSTRATIONS

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FOREWORD

IN the preparation of this book the writers have attempted to give an account of recent social, economic and political movements in Denmark, and a description of the origin and development particularly of institutions peculiar to that country, and which have won her the admiration of Europe. Denmark, during the last half century, has passed through the throes of a wonderful regeneration. Her peasantry has been emancipated from a condition of veritable serfdom ; her education has been liberalised ; her land system, agriculture and finance have been reorganised and brought to a pitch of excellence which is the envy of many a greater, yet less perfectly developed, state.

One of the present writers is English, and the other, Danish. They may therefore justly claim for the book that it is an attempt to see Denmark from within and without. Quotations and sources of information have been given wherever possible throughout the text ; but the authors have to acknowledge much assistance generously rendered to them by friends, both Danish and English, whose names are too numerous to mention. Some parts of the work have appeared in article form in the periodical press, and in this connection we have

to thank the *Daily Chronicle*, the *Westminster Gazette*, the *Manchester Guardian* and Charles H. Kelly for kind permission to reproduce.

It would be too much to hope that a work of this character, dealing with such a range and variety of subjects, shall be entirely free from misconceptions, or that some small errors shall not have crept into the text. For such and all other shortcomings we crave the reader's indulgence, trusting that the general accuracy of the information contained within these covers will sufficiently compensate.

W. J. H.
C. R.

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PART I
THE LAND AND THE PEOPLE

CHAPTER I

THE LAND

Geological Origin — Physical Characteristics — Rivers, Lakes and Forests—The Heaths—The Sand-dunes of North-west Jutland—Afforestation and Reclamation—Flora and Fauna of Jutland and the Islands.

GEOLOGICALLY, Denmark has been produced by the Norwegian mountains in much the same way as the Newfoundland banks are to-day being formed by the icebergs from Greenland. It is often said that every stone in Denmark can be traced back to its original resting-place in Norway, and that if it had not been for this long-continued and powerful glacial action, Denmark would probably have existed as a group of coral and chalk islands rising abruptly from the sea. In support of this theory there are those wonderful and unique formations which in many places have broken through the clay strata, the most beautiful of which is Møens Klint, a range of lofty, turretted cliffs, standing perpendicularly out of the sea, covered with forest growth, and split up into peaks and gorges, pinnacles and clefts. If one sees Møens Klint from the deck of a steamer in the evening when the setting sun is behind it, it is a place of lights and shadows ; a place for the painter ; in a sense symbolic of the character

of the Danish people ; open and free, yet with a hidden strain of pessimism running through it.

Denmark consists of three large and some smaller islands, and a great out-jutting promontory from North Germany. The large islands are Sjøælland, Fuhnen and Lolland, and the promontory is Jutland. Copenhagen, the capital, is situated on Sjøælland, often called Sealand. Taking the country as a whole, it is one of the flattest in Europe ; Himmelbjerg, near Aarhus in eastern Jutland, is the highest point, and it is raised only 550 feet above sea-level. But it is not flat as Holland is flat ; it is pleasantly diversified into rolling moorlands, cornfields and meadows, beech-woods and low hills. Only the small island of Bornholm, however, to the south-east, and far out in the Baltic, contains any really rugged scenery. The rest of Denmark is for the most part quietly rural in character.

The country abounds in small lakes and meres, generally overhung by dense beech-woods ; the largest of these are the Arresø and Esromsø in Sealand, and the Himmelbjerg lakes in Jutland. The coasts of Denmark are in the main low and sandy, the western shore of Jutland in particular. In many places the sea, even during the present century, has made enormous inroads, but strenuous efforts are now being initiated to prevent any further incursions, by means of powerful groynes and embankments.

The surface of Denmark is made up of boulder clay and boulder sand. It is not stratified, though certain stratified deposits have been formed by the action of water, which contain remains of Arctic animals. Most of the chalk belongs to the highest or "Danian" sub-division of the Cretaceous period. It is only in the island of Bornholm that older formations may be observed, and here, as in Sweden, a series of strata appear which belong to the Cambrian, Silurian, Jurassic and Tertiary periods. It is believed by most geologists that Denmark was finally raised out of the sea in something like its present conformation about the close of the Glacial epoch. Certain parts of the country are still slowly rising.

The climate is a little warmer in the summer and a little colder in the winter than in England. The mean average temperature for the whole country is 45.14° , though the "islands" are, on the whole, somewhat warmer than Jutland. The annual rainfall varies between 21.58 inches and 27.87 inches, according to the locality; the heaviest falls occur on the west coast of Jutland, and they decrease in a fairly even ratio eastwards. More than half the rainfall occurs from July to November; the wettest month being September, and the driest, April. Thunderstorms are frequent during the summer months. South-westerly winds prevail from September to March; in April a searching and bitterly cold east wind predominates;

between May and August the winds are for the most part westerly.

There are no large rivers in Denmark. The Gudenaå is the longest. It is in Jutland, and has a course of but eighty miles. Excellent salmon fishing can be obtained in this river, but it is practically unnavigable. The Kolding and the Veile, also in Jutland, are great estuaries which discharge into the Cattegat ; while the Konge and the Varde flow into the North Sea. In Sealand the Sus and the Mölle are the largest ; while in Fühnen, the Odense-Aa is navigable by barges for about forty miles.

The characteristic scenery of the northern and north-western districts of Jutland is boggy heathland, sparsely populated and almost unproductive. Along the west coast stretches a belt of sand dunes, in places five or six miles wide. This arid desert is upwards of 200 miles in length, and extends from Blaavandshuk to the Skagerrack. Irrigation work has been begun, and by a generous use of natural manures and much planting of trees, the drift of the sand has been arrested, and some of this barren waste reclaimed. The process of reclamation is still proceeding.

The sand dunes are continued far out into the sea by the Scaw, a long, low peninsula dividing the Skagerrack from the Cattegat. A small town of about 2,500 people stands on the edge of this great dune desert. It is the most northerly point of



To face p. 20.]

Moorland Scenery in Jutland, with Ribe Cathedral.

[Photo: Bodil Hauxhildt, Ribe.]

Denmark. Its main streets are sand ; its houses often old fishing boats ; its gardens patches of reclaimed beach boasting only a few flowers and a stunted, coarse kind of grass. A little to the north of the town is the great lighthouse, whose beams mark the meeting of the waters of the North Sea and the Baltic. Notwithstanding the depressing character of their surroundings, the people of the caw are thoroughly Danish — warm-hearted, generous and clear-headed.

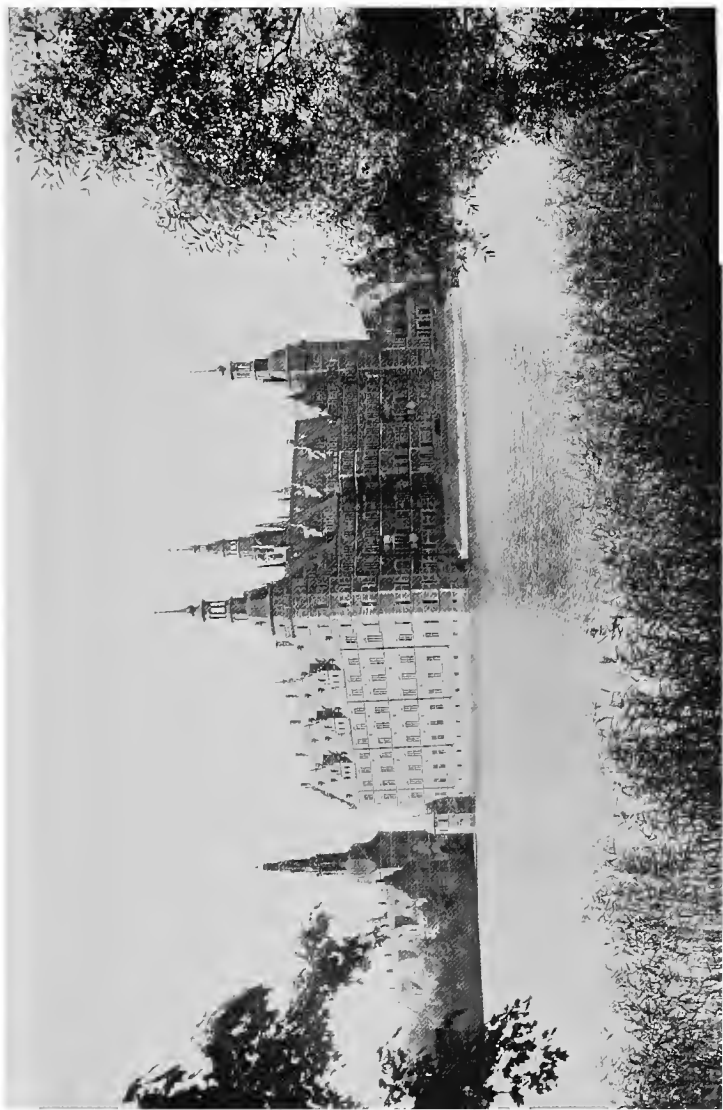
Of forests, Denmark boasts but few. Only 8·3 per cent. of the area is covered with trees. With the exception of England and Portugal, all the countries in Europe show a higher figure than this.

The principal trees in the Danish forests are the characteristic beeches. Thirty-nine per cent. of the wooded area of Denmark is occupied by these noble trees. They are to be found over the whole of the country with the exception of West Jutland and Bornholm, in both of which places the climatic conditions are too bleak and windy. Formerly there were many oaks in Denmark, but they have been displaced by the beeches, the latter being more shady. Only 6 per cent. of the forest area now consists of oak, and the trees are for the most part small. There are very few real old oaks such as we have in England, but the foresters have recently begun to buy acorns in Germany and Holland with a view to increasing the oak percentage.

Of other leaf trees in Denmark the principal are the ash, red alder, poplar, elm and maple, which together make up another 6 per cent. of the forests. The climate is a little too cold for them, however, and they do not flourish so well as in more southerly countries. Pine trees were first imported in the nineteenth century by von Langer, a famous Master of Foxhounds, who came from Hanover. Before 1770 there had been only leaf trees in Denmark. Now something like 49 per cent. of the Danish woods consists of pines, the principal varieties of which are the fir, spruce, larch and mountain fir. Two particularly valuable species are cultivated in plantations, the fir (*pinus silvestris*) and the larch (*larix*).

In the north of Sealand there is the great Grib forest—reached from the town of Hilleröd—where the trees are so dense that the branches intermingle and grow together, and the only sounds that break the deep silence are the songs of birds, and the movement of tiny springs half hidden in the undergrowth. Hilleröd is often termed the Danish Versailles, as it contains the historic castle of Fredriksborg, and on the other side of the forest the palace of Fredensborg, one of the favourite places for the family reunions of many of the Royal Houses of Europe.

Denmark has not much to offer in the way of sport. Game is scarce. There are some red deer, fallow deer and roebucks. In parts of the country,



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Frederiksborg Castle.

hare, fox, squirrel and duck may be found ; more rarely still, pheasant, partridge and snipe. Only in one limited area are there any wild boar.

In former times the red deer were very numerous ; so much so that, in the year 1610, Christian IV. drove from Copenhagen to Kirsholm, a distance of about eight miles, and in one morning shot thirty-six red deer. It is computed that to-day there are not more than 300 of these animals altogether in the whole of Jutland, where they live wild, principally in the forests between Aalborg, Viborg and Aarhus.

The fallow deer was imported in the seventeenth century, and has about the same range as its more intelligent cousin, the red deer. Both are kept on the great estates, but are disliked by the peasants, as they make serious depredations among the potatoes, turnips and corn. The red deer is shot with bullets and the fallow deer with small shot.

The hare is fairly generally distributed. It does a great deal of damage to the farm properties, making free particularly with cabbages, corn, young plants and acorns. It is difficult to extinguish, though its numbers are said to be slowly decreasing year by year. It is the same variety as that found in England, Germany and France, but its ears and tail are shorter than the species found in Sweden and Norway. The range of the squirrel is not so extended as that of the hare. It is regarded as vermin, and slaughtered whenever

opportunity offers. A curious point for naturalists is that the squirrel in Jutland is red, in Sealand, brown, and in Fuhnen, black. Foxes, badgers and boars are exceedingly rare, the latter being only found in the preserved park of Ravnholt.

Of game birds, the pheasant was imported about fifty years ago. It has spread very rapidly. Partridges, on the other hand, have been dislodged and are decreasing. The duck lives in many of the lake districts, but the Danish bird is unusually timid, and therefore very difficult to shoot. Snipe are to be had only between March and October, except on the small island of Amager, near Copenhagen, where they may be obtained at any time of the year.

CHAPTER II

THE PEOPLE

inological—Race Relationships and Characteristics—
The Language—The Danes To-day—Industries—
Suicides—Danish Statistics—The Abstinence Move-
ment—The Moral Life of the Copenhagen Streets—
Marriage and Divorce—The State Church—Social
Customs—Court and Society—Ancient Nomen-
clature—Folk-dancing.

THE people of Denmark belong to the North
man family, their nearest in kin being the
Swedes, the Norwegians and the English. The
dominant type is yellow-haired and blue-eyed.
The language suggests to the ear an admixture of
German and English, with the former element pre-
minant. It is neither so musical as Swedish nor
so guttural as German. When spoken by a young
man, its general intonation is not unlike the Scotch
of the Lowlands. It has often been said that the
English fishermen of the east coast and the Jutland
fishermen of the west coast find no difficulty in
understanding each other when they meet on the
Humbly Grove or Fisker Banks. Indeed, nearly all the
common objects in daily use, as well as all the
verbs of action, and many of the impersonal verbs
possess identical sounds in Jysk—the dialect of
Jutland—and in East Anglian. For English

people the most difficult sounds in the Danish language are undoubtedly the soft "d," the "r" and the long vocals.

The national characteristics of the Danish people are generosity; ~~slowness of speech~~ ^{gentle but firm}; a good-humour which has become proverbial; determination almost amounting to truculence, especially in the case of peasants; an immense capacity for hard work and sustained effort; extreme democratic principles; a strange fatalism which is a mixture of scepticism and hesitation; and finally, a complete and wonderful fearlessness in throwing over traditions and prejudices.

They are an intensely modern people, neither taciturn nor exuberant. The great Danes, those in power and authority, do not always give one the same impression of control and careful breeding that one gets from people occupying the same position in England. But there is a compensating allowance of warmth. They are neither great optimists nor extravagant idealists. Their dreams are of a very practical nature, and there is about them a certain atmosphere of clean and sane humanitarianism which is very attractive. They seem to carry out their reforms in a spirit of common sense which is almost scientific. Perhaps this is because their temperament is genuinely, rather than sentimentally, democratic. It is this averageness about them which doubtless prevents them from mounting to supreme heights, but at the

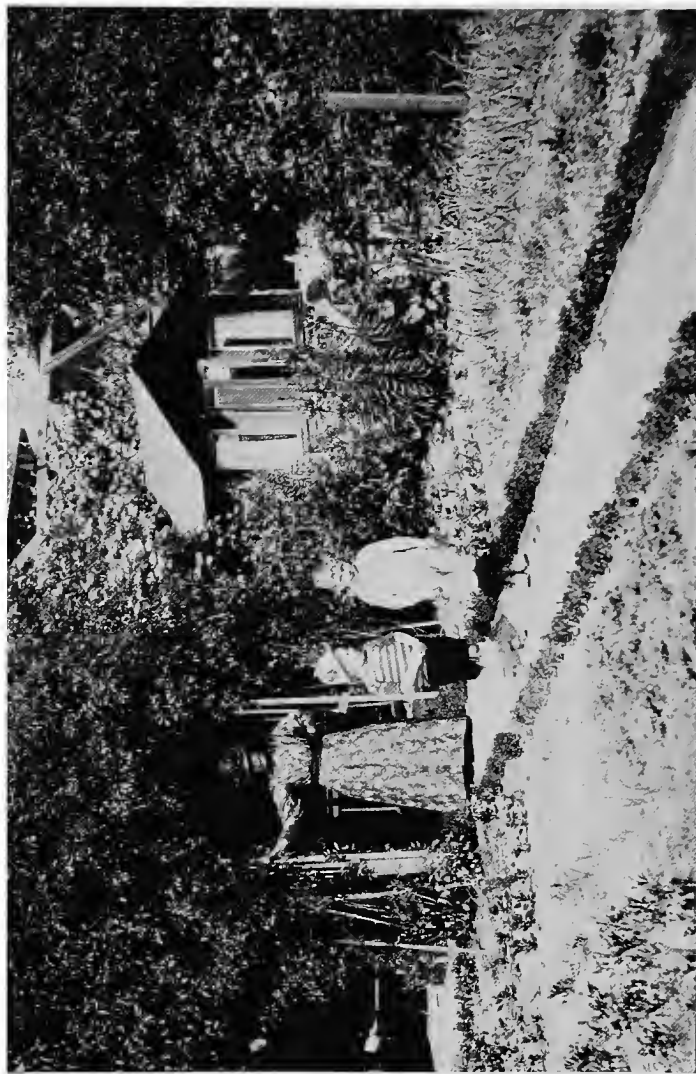
me time saves them from slipping to colossal depths. They are a balanced people, their democracy is broad and practical, and the type is probably nearer English than any other on the continent.

In height the Danes are not quite such a tall race as the English, the average being about one inch less. But they are a hardy and a constitutionally strong people, admirable as farmers and agriculturists, clever engineers and mechanics, and fearless and capable seamen. The number of inhabitants per square mile is about the same as France, but only one-half the proportion found in England. Yet in the last ten years the population of Denmark has increased by 12·5 per cent., while that of England during the same period has only gained 8·8 per cent. The annual birth rate is approximately 28·1 per thousand; in England 20·1 per thousand. The death rate in Denmark is 13·7 per thousand; and 15·7 per thousand in our own country. The most prevalent disease is tuberculosis.

The industries of Denmark, with one exception, do not demand any great toll of life. There are no mines, and but few dangerous trades. The one occupation in which numbers of lives are yearly lost is fishing. Suicides, however, are somewhat greater in proportion to the total population than in most other countries, the percentage being just double that of England in this respect. Only

France, Switzerland and Saxony show higher relative statistics of suicide. Against this it must be mentioned that Danish statistics are so carefully compiled, and so much more complete than those of other and larger countries; and that, when one compares accurate figures with those which are only approximate, it is generally to the disadvantage of the former. In this manner Danish blue books often unduly depreciate Denmark. The proportion of suicides is notably diminishing, owing in great measure to the extraordinarily rapid growth of the temperance and total abstinence movements. On an average out of every five suicides three or four are men, and only one or two women.

The Abstinence Associations alone now number 200,000 members. This movement is not, as in England, regarded as of a semi-religious character, but rather as a hygienic and scientific crusade against a demonstrated evil. Spirits are defined as such beverages which contain more than $2\frac{1}{2}$ per cent. of their weight of alcohol. One of the principal alcoholic liquors drunk in Denmark is brændevin (eau de vin), from which each Dane consumes 1.15 gallons of pure alcohol per annum. But the amount has diminished by upwards of 20 per cent. during the last twenty years, and the rate of diminution is increasing. (Of beer the Danes do not drink so much as the English,) the relative consumption being represented by the numbers two to three.



To face p. 28.

A Labourer's Garden, Copenhagen.

[Photo: H. Dammard.]

ere also a decrease is noticeable. Moreover, the lighter and more harmless Pilsener beers are now much more used than they were formerly.

The temperance movement has been conducted in a very popular manner, free from fanaticism or prejudice, and in a very praiseworthy scientific spirit. The Danes, moreover, have proved that the legislative instrument is more effective than we are inclined to believe in England.

A distinct line is drawn between inns and public houses, the first being defined as houses which receive travellers and provide service for them, but which are not permitted to serve residents of the district; the latter are the houses which cater for all-comers. A licence is given in the country by the Amt or county council, but it cannot be granted if the parish council, or two-thirds of the inhabitants in the parish, vote against it. As a rule one public house is permitted for each 350 residents; but new legislation is expected to decrease the number of licensed premises in proportion to the population. In most cases a licence remains valid for a period of either 5 or 10 years. Licensed premises must be closed at 11 o'clock; in some places at 10 o'clock. In Copenhagen only is it permitted to remain open until 1 o'clock in the morning. It is forbidden to retail spirits to persons under the age of 18 years. The local police have the option of prohibiting female attendance in bars, while

licences may be withdrawn, without appeal, in cases where houses are badly conducted.

Copenhagen compares rather unfavourably with some of the other capitals of Europe with regard to the moral life of the streets. An extraordinary number of natural children are born every year in Denmark. One child out of every four in the metropolis is born out of wedlock. In the whole country the figure is one out of nine. It is difficult to explain these statements, while it is still more difficult to discover extenuating circumstances. Too much freedom is generally permitted during engagements, and betrothals are more frequently broken than in other countries. These two factors undoubtedly tend to cause a slackness in views as to sexual relations, which we are convinced will ultimately work to the detriment of Danish character.

Until 1906 prostitution was controlled in the same manner, as in other Continental countries, by means of licensed houses and regular medical inspection. In 1906 control was abolished, and prostitution no longer legally recognised. The results have been only partially satisfactory. No women are now permitted to earn a living *solely* by this method. They must demonstrate to the police that they have other means of subsistence. Severe punishments are inflicted in cases where persons suffering from venereal diseases are detected either soliciting or procuring. The 1906

v, while it has cleared away the privileged professionals, has led to a notorious increase in number of girls and young women who voluntarily engage in this tragic business, apparently for pleasure ; and whereas before, prostitution was confined to certain streets of the town, it now mounts itself generally, and in a more free and shameless fashion.

Divorces can be obtained with a greater readiness and ease in Denmark than in England. If

two parties can agree as to its necessity, it is sufficient for them to appear before a magistrate.

misconduct on either side is required. The magistrate examines the case with the assistance of a priest, and it is the main function of these two gentlemen to endeavour to arrange the differences between the parties, not to judge upon the merits of the case. Assuming that the husband and wife cannot be persuaded to a reconciliation, a decree of separation is granted for three years, during which they must not re-marry. The decree is not absolute at the end of the three years. Incompatibility of temperament is a sufficient cause for divorce, and the result of this system has been that divorce actions in Denmark neither create the great public scandals which follow similar cases in our own country, nor are accompanied by the morbid and sensational details with which we are familiar in England.

The State Church in Denmark—officially desig-

nated "Evangelically-Reformed"—is Lutheran, and 98½ per cent. of the populace belong to it. Only one-third per cent. remain outside the pale of any religious body. There are therefore few civil marriages, as these are only allowed by Danish law when one of the parties to the marriage is not a member of either the Lutheran or one of the other churches. Notwithstanding these figures, there is a great deal of agnosticism and freethought in the shadow of the Church itself, for the Danes are not naturally a religiously-inclined people.

The divisions in the State Church are neither many nor serious. There is, as in England, a High Church party, which had its origin at the same time as the English High Church party and the Oxford movement. Then there are the Grundtvigians or Merry Christians, a sect founded by Bishop Grundtvig, whose writings and sermons inspired the creation of the Popular High Schools, about which details have been furnished in another chapter. Finally, there are the Evangelicals or Missioners, whose views would place them in England somewhere between the Low Church party and Wesleyan Methodism. There are practically no Nonconformists, and hence religious strife has not been imported very much into educational questions, the State Church still retaining a large hand in the guidance and control of all schools.

If a number of people attending one of the State churches desire to have their own clergyman, they

may leave the church in question and found another, without thereby ceasing to become members of the Lutheran body. Similarly, a resident in one parish may, should he so desire, regard himself as a member of the church in another parish. The internal affairs of a church are managed by a congregational council, chosen democratically, and consisting both of men and women.

At the head of the Church are the seven Bishops of Copenhagen, Fuhnen, Lolland, Aarhus, Aalborg, Viborg and Ribe—who are all theoretically equal, though in practice the Bishop of Copenhagen takes precedence, inasmuch as he alone is the advisor of the Ministry. Next in authority to the Bishops are the Deans, and finally the Vicars. There are not many ecclesiastical ranks as in England. The Deans who serve in the seven cathedrals are termed diocesan. The State Church is liberal both in doctrine and practice, permitting its priests differences which in England would certainly create serious trouble. A movement for disestablishment and separation has greatly increased in strength in recent years.

The services in Danish churches are neither so impressive nor so beautiful as in England. There are no psalms or canticles; ecclesiastical music is not of the same high order; prayers are fewer; and sermons are considerably longer. One observer has declared that “the people seem to come and go just as they please during the whole of the

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The State Church in Denmark—officially desig-

nated "Evangelically-Reformed"—is Lutheran, and 98½ per cent. of the populace belong to it. Only one-third per cent. remain outside the pale of any religious body. There are therefore few civil marriages, as these are only allowed by Danish law when one of the parties to the marriage is not a member of either the Lutheran or one of the other churches. Notwithstanding these figures, there is a great deal of agnosticism and freethought in the shadow of the Church itself, for the Danes are not naturally a religiously-inclined people.

The divisions in the State Church are neither many nor serious. There is, as in England, a High Church party, which had its origin at the same time as the English High Church party and the Oxford movement. Then there are the Grundtvigians or Merry Christians, a sect founded by Bishop Grundtvig, whose writings and sermons inspired the creation of the Popular High Schools, about which details have been furnished in another chapter. Finally, there are the Evangelicals or Missioners, whose views would place them in England somewhere between the Low Church party and Wesleyan Methodism. There are practically no Nonconformists, and hence religious strife has not been imported very much into educational questions, the State Church still retaining a large hand in the guidance and control of all schools.

If a number of people attending one of the State churches desire to have their own clergyman, they

may leave the church in question and found another, without thereby ceasing to become members of the Lutheran body. Similarly, a resident in one parish may, should he so desire, regard himself as a member of the church in another parish. The internal affairs of a church are managed by a congregational council, chosen democratically, and consisting both of men and women.

At the head of the Church are the seven Bishops—Copenhagen, Fuhnen, Lolland, Aarhus, Aalborg, Viborg and Ribe—who are all theoretically equal, though in practice the Bishop of Copenhagen takes precedence, inasmuch as he alone is the advisor of the Ministry. Next in authority to the Bishops are the Deans, and finally the Vicars. There are not so many ecclesiastical ranks as in England. The deans who serve in the seven cathedrals are termed Diocesans. The State Church is liberal both in doctrine and practice, permitting its priests differences which in England would certainly create serious trouble. A movement for disestablishment and separation has greatly increased in strength in recent years.

The services in Danish churches are neither so impressive nor so beautiful as in England. There are no psalms or canticles ; ecclesiastical music is not of the same high order ; prayers are fewer ; and sermons are considerably longer. One observer has declared that “ the people seem to come and go just as they please during the whole of the

period of worship ; the women frequently remove their hats ; and the pastors exhort much, explain little."

The best preachers are undoubtedly to be found in the " Indre " Mission or Evangelical section of the Church. For the benefit of the statistics hunter we may say that the High Church party numbers seven-twelfths of the members of the State Church among its adherents ; the Grundtvigians or Merry Christians, three-twelfths ; and the Evangelicals or " Indre " Missioners, the remaining two-twelfths. This latter section is distinguished both by its old-fashioned and narrow theology, and by the sincere, earnest lives of its members. " Indre " means " home," but the Missioners, in addition to their diversified work in Copenhagen and throughout Denmark generally, also support certain men on the mission field in other countries. The pastors of this section, although still counted priests of the State Church, openly preach the much-criticised and abandoned doctrine of eternal condemnation for unrepentent sinners, but they are so unworldly and self-sacrificing in their social and religious work that their popularity does not suffer in consequence. The energy of the " Indre " Missioners, and the successes which have attended their efforts, are as amazing as they are unprecedented in the religious history of Scandinavia. During the past twenty years they have built no fewer than thirty new

churches in Copenhagen alone, three hospitals, a home for fallen women, and numbers of Sunday-schools. Moreover, they control hotels in all the principal towns in Denmark, Norway and Sweden ; run five or six newspapers, including one daily ; and possess their own printing establishment. They regularly employ over 100 colporteurs and 160 lay preachers ; and it has been computed that in any single year the section holds upwards of 35,000 meetings.

One curious fact may be observed here. The " Indre " Missioners steadily refuse to co-operate with the Grundtvigians, although they are quite willing, and often do, join forces with the High Church party. The reason for this is rather difficult to find. Perhaps the stern Cromwellian pietists who animate the newer evangelical movement find in the freer and more tolerant atmosphere of the Merry Christians a serious hindrance to their work. Certain it is, however, that in spirit Bishop Grundtvig, the founder of the Merry Christians, was not opposed to the essential piety of the Missioners, although he might not have been in sympathy with their narrow theology. Grundtvig died in 1872 at the age of eighty-nine, after having fought a strenuous and life-long battle against the Rationalism then prevalent in the Danish Church. He took a clear-headed and bright view of life, was a man of sunny temperament, broad-minded, a patriot and a lover of the

people. His genius found its noblest expression in the composition of hymns of wonderful depth and beauty, and fired with enthusiasm both religious and national. Before he died he became known throughout Denmark as the "lonely champion of the Bible." His followers are still extremely national in their outlook, and it was largely due to Grundtvig that the popular High Schools were founded, and that the peasants and small farmers became the leaders in the struggle for Liberalism. The Missioners, on the other hand, affect rather to despise the national and liberal sentiment and to consider themselves cosmopolitans. This constitutes another bone of contention between the two sections.

We may conclude our slight review of the religious life of Denmark by saying that the High Church party, as in England, lays its principal stress on questions of doctrine. There are only about 4,500 Roman Catholics in Denmark, and about the same number of Jews. Salvation Army work among all sections and classes is greatly on the increase.

The social life of the Danes, particularly in the metropolis, has in recent years undergone a notable change, developing very much along French lines. Café, salon and restaurant habits are increasing in a pronounced manner. Despite these facts, however, the Danes still remain a charming and hospitable people. Their customs, especially those

associated with their great national and religious festivals, assume the existence of the family as the basis of all social amenities. There is practically no recognition of "grades" in society. Sets—artistic, literary, theatrical, political—are inevitable in any organised social system, and they are of course to be found in Denmark, with this essential difference, that when seeking admission to them, birth or position count for nothing and cleverness for everything.

Christenings, confirmations, weddings, funerals are all conducted with more elaborate ceremony than in our own country. Practically every Dane is a confirmed member of the Lutheran body; and family celebrations in connection with the various stages of the religious life of each of its members involve the profuse giving of feasts, presents, and congratulatory or condolatory cards, as the case may be. The Danes also make a great deal more of Christmas and Easter than we do in England.

It is the custom for both sexes to wear rings when betrothed. The engagement rings are plain gold circlets, and are worn on the third finger of the *right* hand. These rings are not changed on marriage, the same one sufficing both for an engagement and a wedding. Dress rings and other jewellery are much affected, the young Danish girls especially being fond of display of this kind.

The Danes dress well; the men follow the

English modes, while the women are noted in northern Europe for the beauty of their figures and the taste of their attire. Copenhagen tailoring is generally counted superior to that of all other cities, with the sole exception of London.

At the present moment English manners, customs and ideas are in great demand in the Danish metropolis. An Englishman finds a readier welcome than any other national. The Germans, largely owing to the Sleswick-Holstein trouble, are, as elsewhere on the Continent, not held in any great esteem. English is very generally spoken in the homes, the shops, the clubs, and in business, social, political and literary circles.

The Danes, like most small nations, possess a unique facility in acquiring foreign tongues, and the purity of their English accent is excelled only by that attained by their near relations and neighbours, the Norwegians. In the music halls English artistes often fill a very large share in the programme ; in athletics, English cricket, tennis, football or boxing teams annually visit Copenhagen and compete with the best that Denmark has to offer in these several sports ; finally, and perhaps the most convincing test of popularity, several of the most important booksellers in the Danish capital rely for a large proportion of their profits upon the sale of the best works in modern English literature.

The Court does not affect society in Denmark so

much as it does in England. There are a few balls during the winter and one or two dinner parties at the Royal palace every week. These constitute almost entirely the official functions of the Danish court. In no capital in Europe do the members of the Royal family move about in a less formal or more unostentatious manner than in Copenhagen. The reason for this is that the Danes, notwithstanding their genuine spirit of democracy, possess an instinctive reverence for the monarchical institution. They are not republicans, and the King of Denmark is probably safer among his people than any other monarch in Europe, our own not excepted.

At all social functions in Denmark people of all grades or spheres are on an equality. At dinners ladies and gentlemen leave the tables at the same moment, this being due to the fact that practically all Danish women smoke. Hereditary titles are no longer conferred, either by King or Government, and the roll of the old nobility may therefore be regarded as closed. There are, however, very many orders of merit and decorations which may be honourably gained in the political, diplomatic, scientific or commercial worlds.

The traveller in Denmark will be struck by the extraordinary prevalence of personal names ending in *sen*—Hansen, Petersen, Jensen, Sørensen, and the like. This is due to an ancient custom where a man was known by his father's Christian name,

with the suffix *sen* or *son* added ; thus Christian the son of Peter Jensen was not called Christian Jensen but Christian, Peter's son (*Petersen*). In this manner a great deal of unnecessary confusion has arisen, and the State has now recommended, and is actively encouraging, the discarding of these old family names, and the invention of new ones. The Genealogical Institute helps all those who desire it in the choice and legitimising of new names.

The Danes are superb dancers, both in the form of ballet and folk dancing. The Royal Theatre in Copenhagen produces ballets second only in beauty and importance to those of Petrograd. But the finest and most characteristic of the national dances may be seen during the various annual festivals, especially in the country. During the May celebrations, on Valborg Eve, at Whitsuntide and on Midsummer's Eve the best of these folk dances are held ; the Midsummer festival, with its bonfires and fireworks, being the most animated of the four.



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[Photo: Paul Heckscher, Copenhagen.

CHAPTER III

COPENHAGEN AND THE LARGE TOWNS

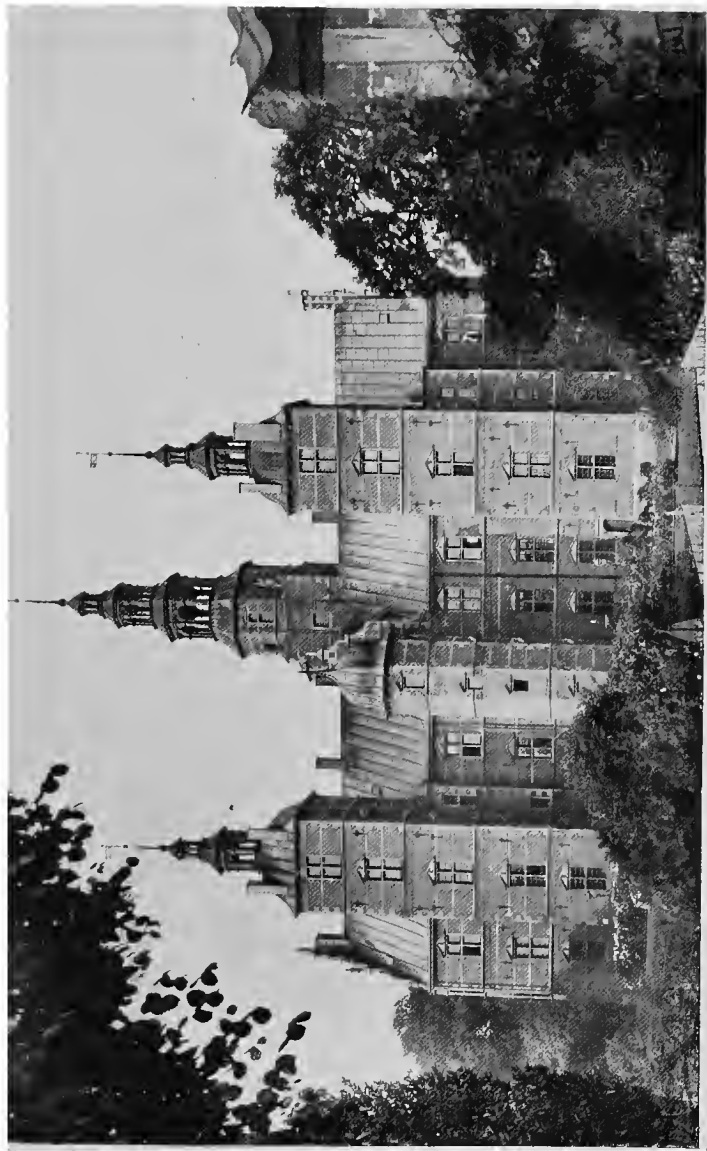
The Danish Metropolis—Its Situation, Aspect, Climate and History—Christian IV., the Building King—The Churches, Monuments, Open Spaces, Museums and Art Collections of the City—The Tivoli—Amalienborg and the Royal Palaces—The University—The "City of Spires"—The Raadhus—Sanitation and Health—Populations of the Principal Towns in Denmark—Elsinore and the Castle of Hamlet—The Sound—Roskilde—Aarhus—Count Frijs—Frijsenborg—Veile—Horsens—Randers—Aalborg—Esbjerg—Fanö—Viborg—Ribe—Odense—Svendborg.

THE Danish metropolis, finely situated on the Oresund, the stretch of water which separates Denmark from Sweden, possesses a quiet, subtle grace and a rare charm, both of position and architecture, which entitle it to rank among the beautiful cities of the world. It is a town of waterways and canals, lakes and inlets, islands and bridges. Its streets are regular and straight, though there are many quaint, narrow byways which remain as relics of an earlier age. In the winter it is a grey northern city shrouded in mist, wind-swept, cold and damp. In the summer it puts on a frivolous southern garb, fills with German tourists, and is one of the most delightful pleasure towns in the world.

Köbenhavn, the native name for the city, signifies the "merchant's harbour." Although it had existed as a fishing village for many centuries in the earliest times, it first became important in 1167, when Valdemar the Great and Bishop Absalon fortified it against the frequent attacks of pirates. In 1254 it was granted a municipal code by Archbishop Erlandsen. Valdemar Atterdag made the rising city his residence for some time, and in 1422 Eric of Pomerania invested it with special privileges. It then rapidly developed into the trade centre of the country, and after 1478, when the University was founded, it became at the same time the seat of government and the centre of culture in the north.

In the middle ages the town had a stormy history. It was sacked by the Germans from Lubeck in 1248, and conquered by Jaromar of Rugen eleven years later. In 1294 a revolt of the citizens was only quelled after much blood had been shed. The town was captured by John the Mild in 1328, and again pillaged by the Lubeckers in 1368. Sieges, religious and feudal strife, visitations of plague, bombardments, fires and epidemics, these constitute the history of the Danish capital from the time of its foundation to the beginning of the nineteenth century.

Much of the old town may be said to have been planned by Christian IV., that great building king, and, perhaps, the most popular of the Danish



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Rosenborg Castle.

[Photo : Paul Heckscher, Copenhagen.]

monarchs since the time of the Valdemars. The present city is divided into three parts : Old Copenhagen, which is contained within the ancient ramparts ; the Vold districts, which extend between the boulevards and the lakes ; and the outer city. A narrow channel divides the old town into two parts.

Kongen's Nytorv (King's New Market) and Raadhuspladsen (Town Hall Place) are the main centres both for traffic, and for that delightful open-air café life characteristic of the Continent. The first named is a large, irregular space surrounded by hotels and offices, and dominated by the Royal Theatre and the Thott Palace, the latter a fine old seventeenth century building belonging to Baron Reedtz-Thott. The Royal Theatre is in the Renaissance style. It was built in 1874 to seat about 1,600 people, and is famous throughout Northern Europe for its fine performances of classical comedies, opera and ballet. Over the proscenium is inscribed the suggestive legend *Ej blot til Lyst* (" Not for pleasure only ").

If one were asked to select the three most interesting buildings in Copenhagen from an historical standpoint, the choice would be difficult. Probably the majority of Copenhageners, at any rate, would suggest the Vor Frue Kirke (Church of Our Lady), the Round Tower, and Rosenborg Castle.

The Frue Kirke, although originally founded in the twelfth century, has been destroyed on so

many occasions by fire, lightning and bombardment that nothing now remains of the original building. It is, however, still one of the most interesting edifices in the Danish capital, if for no other reason than that of its intimate association with the life of the city through so many centuries. The kings of Denmark have been crowned beneath its dome for many hundreds of years. It has been to Copenhagen what Notre Dame was to Paris, the centre both of its civic and religious life. In recent years the church has been rendered more memorable by the acquisition of some of Thorwaldsen's masterpieces. The statues of Christ and the Twelve Apostles placed in the interior are among the greatest works of the immortals.

The Rundetaarn, or Round Tower, is one of the many edifices raised by Christian IV. It was originally an observatory, but is now a show-place, notable chiefly for the extremely fine outlook over the city, the islands, and the Sound, which may be obtained from its summit. It is ascended in an unique manner by means of a very wide spiral road, up which it is possible to drive a horse and carriage. Peter the Great and the Czarina Catherine are said to have performed this feat in a conveyance with four horses.

Of all the monuments to the architectural skill of Christian IV., none surpasses in chaste and harmonious beauty the castle of Rosenborg. It was commenced in 1610 and finished in 1625. It



[Copyright : Underwood & Underwood.]

The Round Tower, Copenhagen.

is a blending of Dutch, Italian and Renaissance styles of architecture, and is filled with the art collections of all the kings and queens of Denmark since the time of its royal builder—gold, silver, enamels, furniture, jewellery, porcelain, amber, lace and ivory, Venetian glassware, tapestries and bronzes. It is a wonderful collection. The famous “Flora Danica” service in porcelain is perhaps the gem of the treasures to be seen here. The choicest specimens of pillar-work, panelling and decorative ceilings to be found in Rosenborg are in the Marble Hall, the Knight’s Hall, the Rose Apartment, and Frederik IV.’s Bedchamber.

Copenhagen contains many beautiful churches. The Frue Kirke has already been described. Of the others, the most striking are the Marmor Kirke (Marble Church), the Russian and English churches, Vor Frelser’s Kirke (Church of Our Saviour), Helligaand’s Kirke (Church of the Holy Ghost), and Trinitatis Kirke.

The Marble Church possesses a great copper dome which is but a few feet smaller in diameter than that of St. Peter’s in Rome. The foundation stone was laid by Frederik V. in 1749, but the building remained unfinished for over a century and a quarter. In 1874, a rich financier, Herr C. F. Tietgen, had it completed at his own expense, though upon a somewhat smaller scale than originally designed. Vor Frelser’s Kirke was erected between 1682 and 1696, and is surmounted by a

tower, than which there is but one loftier in Northern Europe. The view from the "ball" at the top of Vor Frelser's tower takes in the harbours, the old and modern towns, the royal dockyards, the island of Amager, the distant forests of Sealand, and the blue waters of the Sound. The Russian church, with its three great golden cupolas, was built by the Czar Alexander III., and opened in 1883. The English church (St. Alban's) stands in a most charming situation upon the banks of a diminutive lake. The site was granted on perpetual lease by the Danish Government, and the consecration took place in 1887, the foundation stone having been laid by the Prince of Wales (Edward VII.) two years earlier, in 1885. The church was designed by Sir A. Blomfield, and possesses several beautiful stained-glass windows, one of which was presented by Sir Edward Monson, formerly British Minister at Copenhagen.

Helligaand's Kirke contains a handsomely decorated interior. It was originally the chapel of a famous convent. Trinity Church is one of the Christian IV. buildings. Many of Tycho Brahe's instruments were formerly kept here, but in the fire of 1728 they were unfortunately destroyed, together with a number of invaluable books and documents.

Copenhagen, the Athens of the north, is remarkable for the number of museums, art collections, and public statues which it possesses. The principal

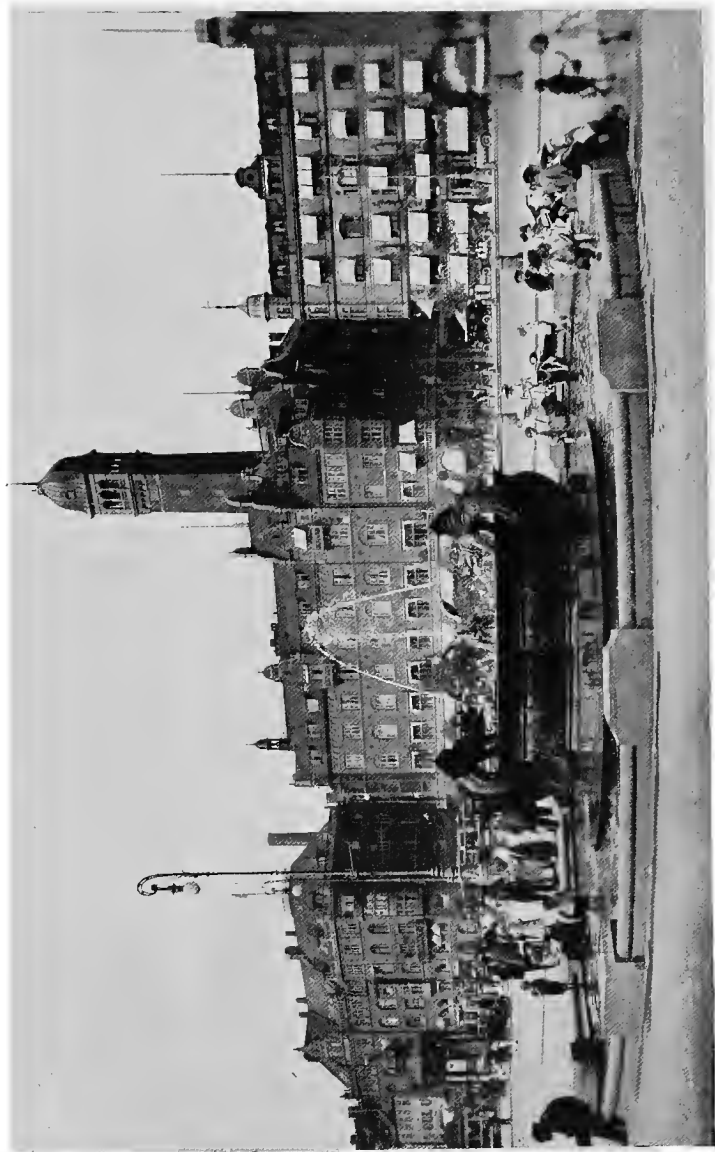
of these is, of course, the Thorwaldsen collection, which is at one and the same time the tomb of the great sculptor and the abiding place of many of his finest works. The great building itself is modelled after an Etruscan tomb.

After the Thorwaldsen collection the Glyptotek is the most important in Scandinavia. It was built in 1888 by Herr Carl Jacobsen, a wealthy brewer. It is a museum devoted both to the antique and modern, and is housed in a handsome granite building, built from designs by Dahlerup and Kampmann. The antique section contains Egyptian, Greek and Roman works in marble and terra cotta, important early Christian relics, wooden statues from Japan, and a specially fine collection of ancient bronzes. The modern section comprises works by the best Scandinavian, German, Italian and French sculptors, most notable of all being the superb Rodins acquired by Jacobsen at immense prices.

The State Art Museum contains the royal collection of engravings, casts, paintings and sculpture, and is a valuable addition to the city's public art treasures. The Folke Museum, one of the most interesting and unique of its kind in the world, is designed to illustrate the life and customs of the people from early times to the present day by means of specimens of their houses, and collections of furniture, household utensils, carvings, and old textile fabrics.

Copenhagen is well provided with parks and promenades. Between three and five o'clock in the afternoon "Ströget," the popular name for the series of fine shopping streets connecting Kongen's Nytorv and the Raadhusplads, is thronged by an animated and typical Danish crowd. On Sunday mornings and on fine summer evenings the Langelinie is the favourite promenade. It was built in 1906, fronts the harbour, runs for some distance out into the sea, and ends in a small pier and lighthouse. At the entrance to this esplanade is a famous fountain statue by Bundgaard of "Gefion with her oxen ploughing up Sealand." Near this statue stands the pretty St. Alban's Church of the English. From the Langelinie the view is very fine, embracing the shipping in the roadstead, the citadel with its ancient ramparts and moats, the celebrated shipbuilding yards of Burmeister and Wain on the Refshale Island opposite, the Trekroner Fort, the island of Hveen, and in the far distance, if the weather is fine, the blue coasts of Sweden. In the neighbourhood of the Langelinie is the Free Harbour, opened to shipping in November, 1894.

Of open spaces Söndermarken, Örsted's Park, and Frederiksberg Gardens are the principal. The first of these is prettily laid out in the English style, and lies close to the handsome residence of Herr Carl Jacobsen, to whose generosity the city of Copenhagen owes so many of her finest art



[Photo: Paul Heckscher.]

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The Raadhusplads, Copenhagen.

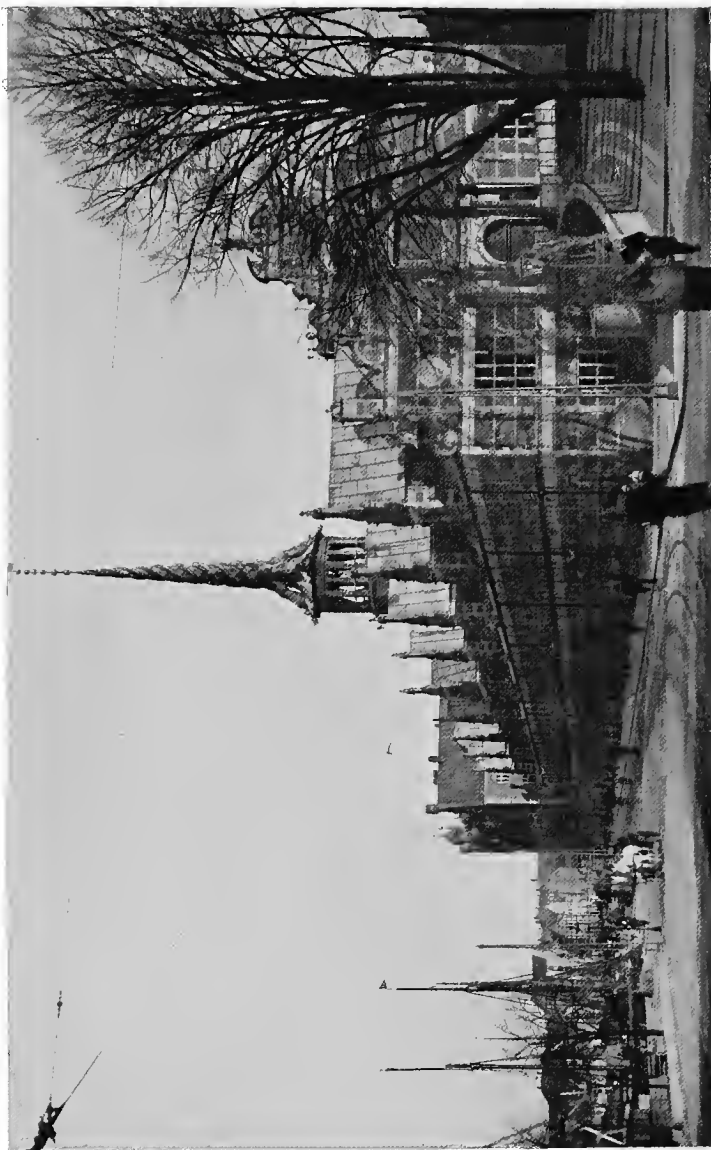
reasures. Ørsted's Park is situated on the site of the old ramparts, is beautifully kept, and contains a good statue of H. C. Ørsted, the discoverer of electro-magnetism. Frederiksberg Gardens, with its lake and canals, is not unlike the Green Park of London. They are in close proximity to the Zoological Gardens, which, although neither so large nor so representative as other collections in more favourable climes, are nevertheless remarkably good, and the only real collection of animals north of Hamburg. Perhaps the most popular of the Copenhagen "lungs" is Kongen's Have (The King's Garden). It belongs to Rosenborg, and is the great place for open-air meetings. The Botanical Gardens in the vicinity contain a very fine palm-house and an aquarium.

The city has an excellent aerodrome, situated on the island of Amager. The ground has a splendid surface, is bounded on one side by the sea, and measures one kilometre each way. Its equipment is quite modern, first-class hangars and refreshment pavilions providing for all the wants of aviators and visitors.

The Tivoli is the most famous of all the pleasure resorts of Denmark. One Danish wag has said that "Denmark is Copenhagen, and Copenhagen is the Tivoli." This exaggeration contains an element of truth. If there is one thing the Dane knows how to do it is to enjoy himself. And there can be no doubt that the Tivoli occupies a very

large place in the heart of all real Copenhageners. The gardens were laid out in 1843, on the lines of the old Vauxhall Gardens of London. Indeed, its first name was "Wauxhall Have." The Tivoli achieved success immediately, and has outlived its English forerunner. To-day it is quite as much an institution in Denmark as the Parliament or the Law Courts. It attracts visitors not only from the other Scandinavian countries, but also from Germany, Holland and Russia, while English travellers arriving in Copenhagen for the first time go to the Tivoli before they know their way to their rooms at the hotel. There are theatres for revues, operettes, and musical comedies, in which the best Danish actors play; restaurants and cafés; bands, dancing halls, concerts, bazaars, amusements and fireworks.

In absolute contrast to the life and gaiety of the Tivoli, one passes along the "Strøget," across Kongen's Nytorv, and through Bredgade, where many of the embassies are, to the aristocratic portion of the city. Here in Amalienborg we find a quiet old-world square of four grey, rococo palaces. The royal family live here when in Copenhagen. When the guard is changed at mid-day the uniforms and the crowd and the music, with the old palaces of Christian VII. standing out against the sky, combine to make a scene from a Hans Andersen tale. Near Amalienborg are the High Courts of Justice; and in Bredgade, a



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The Stock Exchange, Copenhagen.

[Photo : Paul Heckscher.

short distance from the palaces, lies the present building of the Rigsdag. It was formerly a barrack. The Parliament will shortly occupy a quarter of the new palace—Christiansborg—now in the course of erection.

The University of Copenhagen lies in the Holberg district. The house of the great Danish Molière is adjacent. The University buildings are in Gothic style, and quite modern, having been erected between 1831 and 1836. Many of the other structures in the neighbourhood belong to the University and are used as laboratories, or for special purposes connected with the University work.

The Stock Exchange is a particularly handsome building built by Christian IV. in the Dutch-Renaissance style. It is surmounted by a curious yet characteristic spire, decorated with ornate gables. One of the first things which compel a visitor's attention on arriving in the Danish metropolis is the extraordinary number of towering steeples. Copenhagen has been termed the 'City of Spires,' a title for which there is ample justification. Nearly all the churches and palaces and some of the other buildings possess towers capped with tapering spires. The loftiest of them all is to be found on the Raadhus, or City Hall, whose fine proportions, original style of architecture, and beauty of outline, make it the noblest pile in Scandinavia. This building was

begun in 1892 and completed in 1902 by Martin Nyrop. The copper-sheathed spire is 347 feet above the level of the street, and the great four-dialled clock, with its magnificent peal of bells, is worked by electricity. The large covered courtyard is decorated in the style of the Italian Renaissance. On three sides the first story has open galleries supported by pillars ; and fine portals lead into the open courtyard at the back, in which the low arched gallery immediately under the eaves is one of the most striking features. The beauty of the main façade is enhanced by the great castellated wall which rises above the roof and is flanked by two small towers. In front of the wall is a flat open space, protected by a balustrade supporting a row of life-sized bronze figures of the city watchmen of days gone by. Among Nyrop's original ideas is a dove-cot in the form of a round tower on the side facing the Tivoli. This is meant for a flock of white doves, which will hover as " emblems of peace over this civic palace." Martin Nyrop's Raadhus is undoubtedly the finest specimen of modern Danish architecture.

The city of Copenhagen claims to be one of the healthiest of the world's capitals. For the quinquennial period 1881—1885 the crude mortality rate was 22·3 per thousand ; for the period 1906—1910 this had decreased to 15·1 per thousand. The death-rate in London during the same quinquennium was 14·9 per thousand, in Paris 17·5

per thousand, in Vienna 17·1 per thousand, and in Petrograd—the highest of all—25·6 per thousand.

One of the reasons for this low death-rate is the fact that the Danish capital is, owing to its stringent medical precautions, almost entirely free from “dirty diseases”; cholera, exanthematic typhus, typhoid and small-pox are of such rare occurrence that it has been seriously stated that few physicians in Copenhagen have had the opportunity either of seeing or treating them.

The water supplied for drinking in the Danish capital is exceptionally good, being wholly obtained from artesian wells. Surface water is not permitted to be used, and all the sources of supply undergo a weekly bacteriological examination. Copenhagen water contains a heavy percentage of iron, and it cannot, therefore, be conveyed direct from the wells into the mains; it is first exposed for a considerable period to the oxidation of the atmosphere and then filtered.

The sewerage system is one of the completest and most efficient on the Continent. Underground canals convey the sewage *under* the harbour and the island of Amager, where it is pumped into the Sound some three or four miles from the outskirts of the city. Cesspools such as are still used in Paris, Vienna, Munich and other important cities on the Continent, have not been employed in Copenhagen for over thirty years. The milk supply

is under the control of sanitary officers. No meat may be offered for sale unless it has first been inspected and passed by the municipal veterinary surgeons, and then only in shops which are controlled by the Board of Health, which also supervises the sale of sausages and other articles prepared from meat.

There are only four towns of any size in Denmark. They are Copenhagen, which, with the adjacent municipality of Frederiksberg, now has a population of just over 575,000; Aarhus, with 65,000; Aalborg, with 35,000; and Odense, with 40,000. The rest of the country is occupied by small communes, hamlets, villages and outlying farmsteads. The total population does not exceed 2,750,000, of whom it will be seen about one-fifth live in the capital.

In Sealand, north of the metropolis, there are several ancient and historic cities, of which perhaps Elsinore is the most interesting to English people by reason of its supposed connection with Hamlet. The grave of the prince and the brook in which the luckless Ophelia was drowned are pointed out to tourists by enterprising guides; but there is no truth whatever in their assertions. Hamlet was born in another part of the country, and it is doubtful if he ever even visited Elsinore. His burial-place is unknown. Shakespeare is reputed, however, to have visited the town prior to writing his famous tragedy.

Near to Elsinore is the celebrated fortress of Kronborg. The environs of the fortress are exceedingly beautiful—lofty hills, well-timbered parks, the view of the Swedish coast close at hand, and the crowded shipping in the Sound. It is often said that nowhere in the world can so many vessels be seen together and in such constant movement as in this narrow channel between Denmark and Sweden—the connecting link between the Baltic and the North Sea.

Due west of Copenhagen lies the old cathedral city of Roskilde, at one time the capital of the country, and next to Copenhagen the most historic site in Denmark. It was successively the residence of Harald Bluetooth, Svend, and Canute the Great. Most of the Danish kings lie buried here. The cathedral, standing on a lofty eminence, is the finest and largest ecclesiastical building in Denmark, and its grey twin towers form landmarks which can be seen for miles around on all sides.

The second town in Denmark—Aarhus—lies at the end of a fjord on the east coast of Jutland. Its old cathedral of St. Clement is the longest church in Scandinavia. This city is growing in importance. It has become a great shipping centre, and its wealth is mainly derived from large oil and margarine factories. Near Aarhus is the present King's summer residence, Marselisborg, presented to him on the occasion of his marriage by the population of Jutland. The surrounding

country is the most varied in Denmark—lakes and flower-covered heaths and wooded hills. Fifteen miles to the north-west lies Frijsenborg, the seat of Count Frijs-Frijsenborg, the largest landed proprietor in the country. The Count, who is one of the leaders of the Conservative Party, was a great personal friend of the late King Edward.

Other important towns on the east coast of Jutland are Vejle, celebrated for its beautiful situation on Vejle Fjord ; Horsens, an important manufacturing town ; Randers, remarkable for its beautiful women, its great glove factories, and the excellence of its salmon ; and Aalborg, the cement town.

The only town of any size on the west coast is Esbjerg, which lies in an almost direct line between London and Copenhagen. It is sheltered from the winds which blow over the North Sea by the little island of Fanö. The harbour, built between 1868 and 1888 at a cost of £140,000, is the fourth in the kingdom, and since the opening of direct steamship communication between Denmark and England has sprung into a position of importance exceeded only by Copenhagen, Aarhus and Aalborg. In the interior of Jutland the two quaint old cathedral cities, Viborg and Ribe, are mainly interesting to historical students. The churches in each of these cities are notable, and the visitor will be delighted with the numerous storks who nest on the house-tops or solemnly parade the

marshes and on occasions even the village streets of this old-world neighbourhood.

On the island of Fuhnen the only two towns of note are Odense and Svendborg. The former is the third city in Denmark, and one of the oldest places in Scandinavia, being sacred to the memory of the ancient Norse god Odin. Svendborg occupies a fine situation on the south-east coast of the island, and is a favourite summer resort of the Danes from all parts of the country.

CHAPTER IV

THE ROYAL FAMILY

The Children of King Frederik VIII.—Popularity of the Danish Royal House—Democratic Characteristics—Members, Customs, Ramifications—The Clannishness of the Glücksburgs—The Present Ruler—A Character Sketch—The King's "Wife" and "Children."

THE late King Frederik VIII. of Denmark left behind him seven children, of whom the present King is the eldest. He was born in 1870—the year of Sedan—at a time when Danish relations with Germany were severely strained, and although the royal house of Denmark is German in its origin, Frederik and his son Christian soon demonstrated that their sympathies and interests were essentially Danish. The result is that no royal family in Europe to-day is more securely entrenched in the heart and imagination of the people it rules than is the Glücksburg family of Denmark; and certainly no ruling house is more remarkable for its genuine simplicity, its love of democratic customs and institutions, or the real talent and ability of its members.

The second son of the late King Frederik married his cousin, Princess Maud of England, and in 1905 was elected to the throne of Norway. Two younger sons, Harald and Gustav, hold commis-

sions in the Danish army, having, in accordance with the established custom in Denmark, worked their way up from the rank of private soldier. The present King has two unmarried sisters, Thyra and Dagmar, who live with their mother, and one sister who is married to a Swedish prince. The King's uncle, the celebrated Prince Valdemar, is an admiral in the Danish navy. He married the late Princess Marie of Orleans, who is often said to have been the most popular Frenchwoman who ever came to Denmark. Prince Valdemar generally represents the King abroad, and during his long and distinguished career has been offered several crowns, including that of Bulgaria. He has four young sons, one of whom, Prince Axel, is a daring aviator ; while another, Prince Aage, recently contracted a marriage with the beautiful daughter of the late Italian ambassador in Copenhagen, thereby renouncing his royal position and rights. Prince Valdemar's only daughter has recently matriculated at the University of Copenhagen, probably the first royal lady in history to be scholastically examined in the ordinary way, or to be entered as an undergraduate at a university.

King Frederik, as all the world knows, had three distinguished sisters ; Princess Alexandra, who became Queen of England ; Princess Dagmar, who became Empress of Russia ; and Princess Thyra, who married the Duke of Cumberland ; while their brother, Prince George, became King of Greece.

In that one generation, therefore, the Glücksburg family was related to more than half the royal families of Europe ; and it has been computed that the descendants of the old King Christian IX. of Denmark at the present time rule over three-fifths of the inhabitants of the world.

The clannishness of the Glücksburgs is notorious. Queen Alexandra and the Dowager Empress of Russia have jointly purchased a beautiful villa on the Danish coast, some miles north of Copenhagen, in which they reside together during a large part of every summer. Although the children and grandchildren of old Christian IX. are now scattered from one end of Europe to the other, it is a characteristic of them that they never forget the land of their birth ; and Fredensborg Castle was until quite recently the scene of more notable royal reunions than any other palace in Christendom. The heads of the reigning houses of England and Russia, Norway, Sweden and Greece, with their families, came to this historic castle almost every year, in order to participate in the simple, dignified and almost bourgeois life of the modern Danish court.

The present ruler of Denmark, Christian X., is often termed affectionately by his people the Citizen King on account of his unaffected and natural manners, his bluff, slangy method of speech, his clear conception of his constitutional position, and the genuine pleasure he evinces



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Queen Alexandra's Villa, near Copenhagen.

[Photo: Paul Heckscher.]

when mixing up with his subjects, and especially when being treated as one of them. He is a fine public speaker, possessing a cultured voice of great power and range. He eschews ostentation and pomposity as if they were twin plagues, and when speaking of the Queen or the princes he never refers to them as such, but invariably as "my wife" or "my children."

King Christian is far and away the tallest monarch in Europe, towering a full head above the majority of his tallest subjects; and one Danish wit has said that "when the King gets cold feet in December he only begins to sneeze in May, as it will take the worst cold at least six months to reach his head."

One of the King's favourite practices is to board the royal yacht on a fine summer evening and order her captain to take her during the night to one of the many pleasant coast resorts in Sealand or Jutland, arriving there quite unexpectedly in the small hours of the morning, when he will land while the majority of the inhabitants are yet asleep and call upon the burgomaster, afterwards strolling unaccompanied through the streets and chatting heartily with whomsoever he may meet.

King Christian's popularity is deservedly shared by his beautiful wife, Queen Alexandrine, Princess of Mecklenburg, and by their two young sons.

PART II
HISTORICAL

CHAPTER V

GENERAL SKETCH OF DANISH HISTORY

Norse Myth—Sea Robbers—Saxo Grammaticus—Tribal Divisions—The Vikings—Ansgar and the Introduction of Christianity—Alfred the Great and the Danes—Swain—Canute the Great—The First Archbishop of Scandinavia—The Parliaments of Jutland, Sealand and South Sweden—The Wends—Bishop Absalon—Valdemar the Great—The Creation of the Danish Nobility — Canute VI. — Valdemar the Victorious—The Conquest of Northern Germany—The Battle of Reval—The Treachery of the Count of Schwerin—The Darkest Century in Danish History—Bankruptcy—Niels Ebbesen and the Uprising of the Jutes—Valdemar Atterdag—The Hansa States—Queen Margareth—The Kalmar Union—Eric of Pomerania—Christian II.—Dyveke—The Assassination of the Swedish Nobility—Martin Luther—The Danish Lutheran Church—The Building King—The Storming of Copenhagen—Political Changes—The Age of Absolutism — Economic Changes — The Napoleonic Era—Nelson bombards Copenhagen—The Peace of Tilsit—Sleswick-Holstein—The Spirit of Modern Denmark.

DANISH history first emerges from obscurity and tradition into something resembling fact and record about the year 800 A.D. Before this time it is difficult, if not altogether impossible, to disentangle the Danish elements from the vast fabric of general Norse myth and legend. One

fact alone can be stated with certainty. From the earliest times the Northmen had been quick and daring pirates, a race of freebooters and sea robbers, a violent people who loved fighting, the smell of battle, peril and conquest, and the salt scent of the sea wind in their faces.

Much of the spirit of this ancient race can be gleaned from the pages of Saxo, a Danish monk who lived about the year 1200 A.D. As in England prior to the year 800, so in Denmark, we find that the country was divided into a number of tribal kingdoms, of which those of the Jutes and the Sealanders were undoubtedly the strongest and the most feared. As we peruse the monkish pages we hear continually the din of battle, the echo of spear on shield, battle-axe on crested helmet. It is a history of blood and war, the quest of Valhalla, an unparalleled story of intertribal strife.

At length, however, weary of fighting with each other, the Northmen launched their galleys into the farthest waters of the then known world. To England they came, driven and buffeted by wind and wave, to Scotland and Iceland, to France and the fair countries of the South, until the Northern barbarians were the terror of civilised Europe, the one power which still presented a stubborn front to the growing might of Christianity. The Viking ships, entering the mouths of great rivers, devastated and destroyed the rich and fruitful lands upon their banks, annihilated whole populations,

despoiled and desecrated churches and cloisters, spreading dismay and terror wherever they went, putting women to violence, young boys to slavery, old men to death. War to these early Scandinavians was the breath of existence, the only object in life worthy of ardent pursuit. While so much as one drop of blood remained in their veins they were prepared to fight. They died Bersekers. After death they believed in a heaven of fighting gods, with whom they assembled each morning and went forth into battle. Those who fell in the fight would arise when the evening came to take again the axe and spear and sally forth to that never-ending battle of the gods.

For seven or eight hundred years the Vikings pursued unchecked their career of slaughter and violence. Then in 826 the German monk Ansgar travelled into Denmark, and set the first seeds of Christianity in the heart of this untamed and barbaric people. A few years later Harald the Blue-toothed was baptised, the first king of the Danes to accept the religion of Christ.

The history of Denmark between the years 800 and 1042 is so interwoven with that of England that it cannot easily be written apart. The Danes in the reign of Ecgberht swept up the Thames to London, and although in succeeding reigns they were repeatedly repulsed and driven back, they continued to arrive in England in greater and greater numbers. Alfred the Great and his sons

succeeded in temporarily destroying their power, but under Swain the Two-bearded they renewed their supremacy. This was the direct outcome of that treacherous massacre of all the Danes in England upon St. Brice's Day which blackens the memory of King Æthelred. Swain, hearing the terrible news, swore to revenge his murdered countrymen, and set forth from Denmark to the conquest of England. He succeeded admirably in carrying out this project, and Æthelred's kingdom was shorn of all but Wessex. Swain was followed by his son Knud (Canute), who in single combat defeated and slew Æthelred's son, Edmund Ironsides, subsequently annexing Wessex to his kingdom, which then embraced the whole of Denmark, Norway, England and parts of Sweden.

During the reign of Canute English and Danish customs, laws and methods of administration naturally became intermingled. Much was taken from each country and adopted in the other, though, speaking generally, it may be said that the Danes in England became merged quietly with the people whom they had conquered.

During the century which followed the death of Canute the Christian churches in Denmark, Norway and Sweden increased in numbers and influence. In 1104 the first Archbishop of Scandinavia was appointed. He established his seat in Lund, the principal town of the South Swedish provinces, which then belonged to Denmark. The

capital of the Danish kingdom in these days was Roskilde, an important town in Sealand.

During this period the three dominant partners in the kingdom were Jutland, Sealand and the South Swedish provinces. Each of them possessed its own independent parliament (*ting*), whose functions were to make and administer local laws and elect a king. When the same personage was elected by all three *tings*, the election was declared valid for the whole kingdom. In 1147, however, the three local parliaments chose each a separate king, and as none of them would give way, a long and protracted civil war ensued. After ten years of desperate fighting the nominee of Jutland destroyed the Sealand and Swedish candidates, assumed the sceptre of the three kingdoms, and became one of the mightiest kings in Danish history. This was Valdemar the Great.

Under the preceding kings Denmark had been persistently harassed by a Slav tribe called the Wends, whose home lay on the southern shores of the Baltic. These people organised annual piratical raids to the rich flat lands of the Danes, much in the same manner as the Danes in their turn conducted operations against the eastern shores of England. However, as soon as Valdemar had secured his throne, he devoted the early years of his reign to the subjugation of these Wends. He carried the war boldly into the enemy's country. With the assistance of his friend Absalon, one of

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the heroes of Danish history, a great statesman and soldier, Bishop of Roskilde and afterwards Archbishop of Lund, he in 1168 took the Wendic capital, and forced the defeated pirates to accept Christianity and Danish suzerainty at the same time. Absalon subsequently founded the royal city of Copenhagen.

The period of Valdemar the Great and Bishop Absalon is one of the most pregnant in the history of this people. Before Valdemar the sovereigns of Denmark had ruled largely by personal power, almost without parliaments or advisers. They had been rich men, dependent for their position and authority upon their wealth and personality. It was the *man* who was strong, and not his kingly office. Valdemar, however, proceeded to strengthen the office, while at the same time retaining the authority of the man. He sought the alliance and advice of the great nobles and ecclesiastics. He, in fact, created the Danish nobility by the simple process of exempting certain wealthy people from taxation on condition of military service in times of need.

Valdemar was succeeded by Canute VI., who was able to maintain the power gained by his predecessor. It was in the following reign, however, that of Valdemar the Victorious, that Denmark advanced to the proudest position in its history. This truly great monarch continued in the tradition and policy of Absalon, the conquest of

Northern Germany, until at length he was master of all the rich and fertile lands north of the Elbe. The Danish king ruled from Lund to Hamburg and Lubeck.

The Pope then sought his assistance in the matter of the bishopric of Esthonia. The German Order of the Sword had conquered parts of Esthonia and established a bishop therein, but, the natives having revolted, the ecclesiastic found himself in a position of grave difficulty. Valdemar entered Esthonia and fought a battle on his behalf near Reval, in which he was victorious. Tradition has it that during the progress of the fight a new standard fell from heaven into the midst of the Danish army at a moment when it was near to being defeated. The miraculous appearance of this blood-red flag, with its white cross of hope, encouraged the Danes to further and more desperate efforts, and when at the end of the long day they remained the victors of the field, the heaven-sent standard was forthwith adopted as the national flag of Denmark, and continues so to this day.

The King of Denmark was now the mightiest potentate in Northern Europe. The Baltic had become a Danish Mediterranean. In his own country Valdemar was on friendly terms with the Church, the nobility and the people. But, like many other empires built up in a single reign, that of Valdemar's was to prove of short duration.

When hunting one day upon a small island, the King was treacherously taken prisoner by one of his vassal kings, the Count of Schwerin, who immured him in the dungeons of his ancestral fortress for three years. Subsequently he was ransomed and released, but only on condition that he gave up all the States he had conquered, with the sole exception of Esthonia. Valdemar courageously attempted to regain his former dominions, but was defeated in the battle of Bornhöved, one of the most decisive in the history of Denmark, since it stopped for ever the Danish expansion to the south. The King devoted his declining years to internal administration. His legal code was used in Sleswick until the year 1900.

The century following Valdemar was the darkest in Danish history. Valdemar's three sons succeeded each other on the throne, but they were all vicious and incapable men. The first was killed by one of his brothers, the second by the people; the third was perpetually embroiled in quarrels and disputes with the Church. The succeeding King was executed by the nobles, while his son continued the unhappy tradition of alienating Church and State commenced by his father.

About this time there grew up in Denmark a custom which ultimately became productive of incalculable misery and strife. The younger sons of the King were given parts of the country in feud, and these sub-kingdoms were declared

hereditary. This unwise procedure created a class of royal nobility owning vast properties and therefore commanding much weight and influence in the national councils. The power of the King proportionately declined. Quarrels with the Church and with the royal nobles, prominent among whom were always the dukes of Sleswick, compelled the King to spend more and more money in petty warfare and the maintenance of such power as still remained to him. The treasury was so impoverished by the continual strain thus placed upon it that eventually the King was reduced to borrowing money from the Counts of Holstein, who in return for their assistance were granted extensive mortgages upon one part of the kingdom after another. By the year 1320 very little unmortgaged territory remained which the King of the period, Christoffer II., could call his own. Virtually the Holstein counts were the rulers of Denmark. Between the years 1332 and 1340 there was no king. The land of the Dane had passed into the hands of money-lenders. Holstein was supreme in the ancient seat of the Northern sea-kings.

The darkest and most difficult epochs in a nation's history invariably produce its strongest men. Denmark was again to gather strength and sit in the seat of the mighty. On the night of April 1st, 1340, a young Jutland noble, Niels Ebbsen, crept into the castle of Randers and

killed the Count of Holstein. This was the signal for a general uprising of the Jutes, which resulted in the expulsion of the Holsteins from Denmark. A young prince, Valdemar Atterdag, was elected king. He proved a brilliant ruler, though he cannot be cleared of the charges of self-seeking, unscrupulousness and dishonesty which have been so often and so justly urged against him. He reigned for thirty years, during a most hazardous and trying period, crushing many rebellions, making order out of financial chaos, engaged in continual warfare with both foreign and domestic enemies. Sweden, during the time of Denmark's extremity, had taken advantage of the opportunity to annex the Danish provinces in the south of her own land. The Hansa States were rapidly increasing in power and wealth. The exiled Count of Holstein and the Duke of Mecklenburg were perpetual thorns in the side of the young ruler. Yet he succeeded in defeating them all. He repaid the loans for which his country had been given in mortgage. He forced Sweden to relinquish the southern provinces; he curbed the rising Hanseatic power; and when he died in 1375 Denmark was again a power in the North.

Queen Margareth, the daughter of Atterdag, now ruled as regent for her son, the young Olaf. This gifted woman was the widow of the King of Norway, so that in the person of Olaf, the Danish and Norwegian crowns were united. The young



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[Cop., right: Underwood & Underwood.

Interior of Palace Church, Frederiksborg Castle.

prince died shortly afterwards, and Margareth, assuming absolute power, was elected also Queen of Sweden. The three Scandinavian countries were now ruled by one sovereign. In the year 1396 the so-called Kalmar Union was devised, a constitution which had for its object the perpetual union of Scandinavia, while according local autonomy to the separate countries. Margareth evidenced supreme capacity and genius in her administration of the three countries, and although Eric of Pomerania was later elected king in her place, she nevertheless contrived to retain the real power until the day of her death. She died in 1412, and almost immediately disruption occurred. Eric was accused of favouritism, of harbouring a strong preference for Danes in positions of office. Eventually he was compelled to fly the country, when Sweden elected one sovereign and Norway and Denmark another. Thus ended the first brief Scandinavian union.

The new King of Denmark was a mediocrity who accomplished nothing, and was undistinguished even by vices. He was succeeded by Christian I., the first king of the Oldenburg family, a house which ruled in Denmark for more than four hundred years (1448 to 1863). This king made a great though unsuccessful attempt to reconquer Sweden. The two countries were, however, again united under his son, Hans, who reigned from 1481 to 1513. But whilst the first Scandinavian union

had lasted for some fifty years, the second barely exceeded thirty years in duration.

King Hans was followed by Christian II., one of the most striking personalities of his age. He had been greatly influenced by the new humanitarianism which was then gaining prominence, and made some endeavours to ameliorate the unhappy condition of the lower orders. His benevolent schemes were, however, resented by the nobles and landed gentry, and in addition failed to secure the support of the Church, because, instead of seeking advice from her priests, the King had rather sought it from his mistress, a beautiful Dutch girl, whose name was Dyveke. On several occasions the Swedish nobles conspired against him, until, exasperated, he took a bloody revenge. At a great meeting of the nobility in Stockholm in 1520 he caused one of his friends, a clergyman, to rise and denounce hundreds of the best families for treason against the State. The accused were thrown into prison, tried by a court of hostile citizens, condemned upon the flimsiest of evidence, and executed. This outrageous deed was followed by a general revolt in Sweden against Danish rule, and the Danes were compelled to abandon the country. There has since been no union between Denmark and Sweden. Instead, this unwarrantable execution of Swedish nobles led to those long wars and recriminations which later blacken the pages of the history of both countries. Three years after this

event Christian II. was driven from Denmark. Seeking the assistance of his brother-in-law, the Emperor Charles V., he endeavoured to re-enter the country, but was taken captive, and remained a prisoner for the rest of his life.

Martin Luther had now commenced his work in Germany, and shortly after the death of Christian II. the Danish Lutheran Church rose suddenly into power. The Protestants in Denmark nominated one king, and the Catholics another. The Catholic nominee was a child, and he was supported in his candidature by the Hansa States. A war between the two religious parties followed, which continued for three years and ended in a decisive victory for the Lutherans. The end of this war saw also the decline of Hanseatic power in the Baltic. The Catholic Church in Denmark was abolished in 1536, when Protestants were appointed to all the bishoprics. The church lands and properties were appropriated partly for the establishment and endowment of the new Church and partly for educational purposes.

The history of Denmark in the sixteenth, seventeenth, and eighteenth centuries is the history of a rapidly declining power. Since the separation from Sweden in 1520 the relations between the two countries had been constantly strained. From 1563 to 1570 they were at war, the result of which was so uncertain that neither country gained anything, and both celebrated the victory.

From 1588 to 1648 Denmark was ruled by Christian IV., a monarch notable for the many striking and beautiful edifices which he caused to be erected in Copenhagen. In his reign Denmark became embroiled in the Thirty Years' War in Germany, fighting on the Protestant side. The Emperor, however, invaded and took possession of Southern Jutland. Denmark retired from the war having gained nothing and lost prestige, money and lives. Christian then became envious of the success of the Swedes in Germany. Making a slight pretext, he declared war upon Sweden, and at sea achieved some measure of success. Notwithstanding this, he was heavily defeated on land, and at the conclusion of peace Denmark was compelled to surrender two Norwegian provinces as well as some of her islands in the Baltic.

The next king, Frederik III., endeavoured to regain what had been lost by his predecessors, but was unsuccessful. The Danes now finally lost the South Swedish provinces. In the following year, the King of Sweden, repenting that he had not asked for more at the peace of Roskilde, stormed Copenhagen on the night of February 10th, 1659. The city was valiantly defended by the King and the citizens, and on the morning of the 11th the Swedes retired. As a result of this raid the island of Bornholm, in the Baltic, was given back to Denmark.

The events leading up to 1659 had demonstrated

the incapacity of the nobility, and in 1660 the States of the Realm decided to change the form of government. The power was withdrawn from the nobles, and given absolutely into the hands of the King. At the same time, the citizens of the towns were granted extensive powers in local matters. An age of absolutism followed for a century and three-quarters.

This period, although it added no new possessions to the Danish crown, was productive of much lasting good to the Danish people. Education became more general. Trade and industry revived. The old code of Valdemar was carefully revised and adapted to the altered conditions. Important reforms in the system of land tenure were instituted. The peasants, however, still had much ground for complaint. A military law was passed in 1701 which provided that no peasant could leave the estate on which he was born from his fourteenth to his thirty-fifth year. This limit was later extended to the fifty-fifth year. The landlords were given certain rights over their tenants. They could, for example, decide which of them should be drafted into military service. The story of the emancipation of the peasants is outlined in the chapter on land tenure. It may be here remarked that the power of the landlords in this direction, and the compulsion to dwell on the estates were both simultaneously abolished in 1780. During the era of absolutism Danish

mercantile trade commenced, and was fostered by the foundation of many companies designed expressly for foreign trade and exploitation. One of the companies dating back to this period for its origin is the now world-famous Royal Copenhagen Porcelain Manufactory.

The long peace which Denmark enjoyed from 1720 until the Napoleonic era was a period of internal development, but not external expansion. At the beginning of the nineteenth century this beneficent peace was rudely shattered, and Denmark was plunged into wars with both England and Sweden. During the American War England had claimed the right to search all mercantile ships for contraband. Denmark, Sweden, Russia and Holland constituted themselves into an armed neutrality, claiming that a neutral flag should also cover contraband of war. In 1798 France commenced to take such vessels as were not powerfully convoyed by warships. Shortly afterwards Napoleon changed his policy towards, and in favour of, the Armed Neutrality of the North, in order to be in a position to more effectively direct the whole of his strength against his chief enemy, England. The British Government demanded that Denmark should withdraw from the coalition, and dispatched a fleet under Sir Hyde Parker and Lord Nelson. The Danes were quite unprepared, but, with the assistance of some old hulks, they offered a courageous and desperate resistance. Nelson

attacked on April 2nd, 1801, with a strong fleet and 1,200 cannon, as against the 600 cannon possessed by the Danes. After five hours of bombardment the Danish batteries were silenced, and most of the Danish ships captured. Nelson then sent the following message to the Danish Government: "Lord Nelson has instructions to spare Copenhagen when no longer resisting, but if the firing is continued, he will be obliged to burn all the floating batteries he has taken, without having power to spare the brave Danes who have defended them."

The city capitulated, and Denmark withdrew from the Northern coalition. It cannot be supposed that Nelson actually intended to carry out his threat, but it had the desired effect.

For some five years following the bombardment of Copenhagen Denmark, although not in sympathy with the aims of Napoleon, contrived to maintain her neutrality in the struggle between England and France. At the peace of Tilsit, however, she was forced to join the other Continental nations, at the behest of Napoleon, in the famous alliance against England, designed to kill British commerce by closing every port of Europe to British ships. As in 1801, the English Ministry decided to break up the coalition by attacking the weakest of its members. Accordingly, in 1807, a fleet was again dispatched by Canning to Elsinore with the demand that the Danish fleet

should forthwith be handed over to the British admiral as a hostage until the war with Napoleon should be terminated. Meeting with a refusal, Copenhagen was once more bombarded, on this occasion for three days. The Church of Our Lady, the University and many of the finest public buildings in the city were either damaged or destroyed, and the whole of the Danish fleet was taken to England.

During the succeeding years Denmark entered into a defensive alliance with Napoleon and was successful in harassing British shipping in Danish waters. Bernadotte, who had been elected King of Sweden, deserted the cause of the French emperor, and went over to the side of England, almost immediately declaring war upon Denmark. Napoleon sent troops to assist the Danes, but owing to the vigilance of the English ships in the Sound between Sweden and Denmark, they were prevented from landing on Swedish territory. The war dragged desultorily on until the defeat of the Corsican in Russia, when the Danes were compelled to sue for peace. The terms were the surrender of Norway to Sweden and of Heligoland to England. This was in 1814. The Dano-Norwegian Union had then lasted for more than four hundred years.

Denmark had now been shorn of all her foreign possessions with the sole exception of Holstein. There followed a period of internal reconstruction. In 1813 the State had verged on bankruptcy,

owing to the heavy expenses entailed by the war. Trade and commerce had been crippled. The standard of living among the peasantry had deteriorated, and the national spirit had sunk to its lowest ebb. The only thing that had gained in strength during this depressing period was the literary art. The opening years of the nineteenth century are often counted the golden age of Danish literature.

It was first necessary to place the finances of the country upon a stable basis, and how this was accomplished is related in a subsequent chapter. Many far-reaching reforms were planned and successfully carried through.

The recuperative decade was rudely broken in 1848, the year of the revolts in Paris and Berlin. The German-speaking population of the provinces of Holstein and Sleswick rose against the Danish rule, and invited the Duke of Augustenburg to become their prince. The Prussian Government conceived this to be a favourable opportunity to execute a counter-stroke, with a view to diverting attention from the Berlin revolution. An army was sent to help the Sleswick-Holsteiners against Denmark. In 1849 the Danes defeated the Prussians at Fredericia, and the Prussian army was withdrawn. The rebels however still continued to maintain the struggle, but were eventually overborne and reduced to submission. The Duke of Augustenburg then formally abandoned his claims,

But the trouble was not yet ended. The German elements in the population of the two provinces clamoured for Prussian dominion. The Danes naturally desired to remain Danish citizens. The inevitable resultant of these two opposing forces was friction. In 1863 an Act was passed through the Copenhagen Parliament giving one assembly to Sleswick, where the Danes were predominant, and another to Holstein, where the Germans were in the majority. In this year the last king of the house of Oldenburg died. He was succeeded by Christian IX., a member of the Glucksburg family. The Duke of Augustenburg now reiterated his claims to Sleswick-Holstein, and as the Danish Government refused to rescind or amend the Act of 1863, Prussia and Austria together declared war on Denmark. It did not last long. Denmark expecting assistance from Sweden and the other powers who had guaranteed her integrity, was disappointed. At Dybböl, in Sleswick, the Danish army was overwhelmed and crushed, after a spirited defence lasting for more than ten weeks. At the peace Denmark relinquished the two provinces to Prussia and Austria jointly.

For two years these two powers retained their dual control, until 1866, when they were at war with each other. At the conclusion of that war Sleswick-Holstein became German, on condition that if at any time the people of Northern Sleswick voted for a return to Danish rule, that province

was to be handed back to Denmark. In 1869 the Danish Government opened up negotiations with Bismarck with this end in view, but as Prussia claimed jurisdiction over the German-speaking peoples there, and as it was rightly considered that this would in itself afford the Berlin Government a pretext for interference in purely Danish affairs, the population of Sleswick was sacrificed to the growing idol of Teutonic Imperialism. In 1878 the stipulated alternative was withdrawn from the articles of peace between Prussia and Austria.

The people of Sleswick, notwithstanding their inclusion in the German empire, are still largely Danish. The Danish tongue is spoken. Their sympathies and antipathies are precisely the same as those of the people of Denmark, and they continue under very depressing conditions to foster and encourage the national spirit, in the hope that one day they may be again united to the mother-country. The lamentable events of 1864 led many to believe that the days of Denmark as a nation were numbered. That this has not been the case is a tribute to the vital energy and inherent courage of the people. The spirit of the old Vikings is not yet dead. The race has rallied to the appeal of one of the national poets, to conquests in a new field, to internal development, culture, education, social laws, science and agriculture. "What outwardly has been lost shall inwardly be regained." That is the moving inspiration of young Denmark.

CHAPTER VI

POLITICAL HISTORY FROM 1849 TO THE PRESENT DAY

The Constitutional Agitation—The Law of 1849—The English Model—Claims of Holstein—Increasing Friction—The Constitution of July 28th, 1866—Methods of Election to Landsting and Folketing—The National Liberal Party—Rise of Farmers' Representatives—An Experimental Period—New Criminal Code and Provision of Railways—The Position in 1870—The "Internationale" and the Socialists—National Defence—Estrup—The Leaders of the Democratic Group—Refusal of the Budget—Government by Royal Decrees—The New Military Law—General Bahnson—Estrup's Defence—Storm of Opposition—Attempt on the Premier's Life—The Rigsdag Dissolved—Provisional Budgets—Fortification of Copenhagen—Estrup's Social Legislation—The Reconciliation—Estrup's Retirement and Death—Denmark's First Democratic Government—Deuntzer—System of Taxation Revised—The Alberti Frauds—Trials before the Realm Court—Subsequent Events—Some Characteristics of Danish Political Life.

THE effects of the constitutional movement which spread over the whole of Europe in the thirties and forties of the nineteenth century were strongly felt also in Denmark. From 1660 the King had been absolute. In the early part of the century demands for a constitution began to be

made, which, growing in insistence, at length became so imperative that the King, hearing in them the knell of royal absolutism, and not desiring to furnish a cause for revolt, wisely decided to accede to the wishes of his people. Frederik VII. accordingly on June 5th, 1849, granted and signed the Constitutional Law. Modern political history in Denmark began on that day.

Frederik's constitution, modelled upon the English, provided that the power should reside with the King and the Rigsdag. The latter was divided into two *Tings*, the Folketing (Lower House) and the Landsting (Upper House). The method of election to the popular chamber was roughly the same as in England, with this important exception, that each man possessed only one vote, and was not entitled to exercise it until his thirtieth year. On the other hand, the franchise was wider than in England, owing to the absence of a property qualification. The Landsting remained in the hands of the King and the great landowners. The former possessed the right of personally selecting one-fifth of the members of the Upper House.

In this first Rigsdag the Holstein deputies claimed that matters affecting only the people in that province could not rightly be determined by an assembly the majority of whom were Danes. In this protest we find the ultimate origin of Denmark's trouble with her German provinces. As

time advanced the friction increased rather than diminished, until 1863, when a new Constitutional Law was carried by the Rigsdag, providing a separate assembly for Holstein, while retaining in the national Parliament the power of veto and of social legislation affecting the whole kingdom. Sleswick still remained without a local parliament.

After the loss of the two German provinces the question immediately arose whether to retain the Constitutional Law of 1863 or revert to that of 1849. The Democratic parties in the Rigsdag argued that the 1863 constitution had been drawn up to meet special conditions, and that the original constitution should now be revived. The Conservative Ministry did not take this view of the matter, preferring to revise the constitution of 1863 rather than return to the earlier one. A deadlock was threatened, and would doubtless have involved serious consequences had not the parties come to a compromise whereby an intermediate course was taken, and a new law formulated which embraced the important features of both the older laws. The constitution of July 28th, 1866, was the result.

The method of election to the Landsting was changed. Twelve members of this assembly were now chosen for their lifetime by the King ; fifty-four members were elected by the people in a somewhat indirect and involved manner : as to one-half by the voters to the Folketing, and as to the other half, by the land and property owners.

In the country, the owner of the largest estate in an electoral district possessed the same influence as did all the other voters in the district put together ; in a town, that fifth of the inhabitants which paid the most income tax chose the same number of members as the remaining four-fifths of the electorate.

The party distinctions immediately following the granting of the new constitution were neither well defined nor constant. The National Liberal party, which from 1849 had been the strongest body of political opinion in the country, had now assumed a more conservative bias, and while retaining a majority in the Landsting had lost ground in the Folketing. In the latter chamber the Left party, composed mainly of farmers' representatives, held the chief power.

It was largely a formative and experimental period. The most important law carried through was the new Criminal Code ; but perhaps the greatest and most lasting work of these early parliaments was the provision of the network of railways which was subsequently to prove of such immense assistance to Denmark in the development of her agricultural resources.

In 1870 the general aspect of Danish politics changed materially, taking approximately their present lines. A Right party was formed, with a policy which enabled it to embrace the old National Liberals and some of the more conservative of the

new Left. The latter party split up into a number of well-defined groups, all of which agreed in demanding that the King should form a Ministry from that party which held the majority in the popular chamber, and that the Budget should be the prerogative of the Folketing, both of which principles were then quite novel to Denmark. The Right, however, successfully maintained that the two Houses should possess co-equal power, contending that a system which in England had been slowly and genuinely developing during many centuries could not be immediately adopted in Denmark.

The Socialist party now made its somewhat inauspicious entrance into Danish politics. A branch of the "Internationale" had been formed, and a great propagandist open-air meeting arranged. This assembly was summarily forbidden by the police, and its promoters first imprisoned, and subsequently deported to America. No more was heard of the movement for some considerable time.

The first important struggle between the Right (Conservative) and Left (Democratic) parties arose on the question of national defence. The Conservatives maintained that it was at least necessary to be in a position to defend the capital, and demanded money from the Folketing for this purpose. The Democrats, who had a majority in the lower chamber, denied this principle, contend-

ing that to fortify Copenhagen would not only prove expensive and futile, but in addition actually harmful. The utmost concession that could be wrung from them was for the provision of a movable water-fort, which could be transferred to the point of danger as and when required. Two Conservative Ministries were forced to resign; yet each time the King appointed a new Ministry from the same party. On the latter occasion, in 1875, Herr Estrup, an extraordinarily fearless and strong-willed politician, became Prime Minister. He had previously been Secretary of State for the Home Department, and in that capacity had evidenced great ability and firmness. Appointed in the face of an adverse majority in the Folketing, he seems to have resolved to carry on the government of the country as much as possible by royal decrees, a policy which later he successfully adopted. Estrup at once demanded money for the sea-fortification of Copenhagen, a demand which was promptly refused. The Prime Minister then dismissed the Parliament, but the ensuing elections went so strongly against him that out of 102 members to the Folketing he could only claim the support of twenty-eight. Still he refused to listen to the clamour for his resignation. The leaders of the Democratic group were Berg, an orator and a man of rare parliamentary gifts; Count Holstein-Ledreborg, the most eloquent Dane of his time; and Viggo Hørup, the first

political journalist to rise to the front rank of Danish statesmen. The last of this trio represented the most modern movements in literature, politics and social life, inspired and moulded by Georg Brandes.

The Left endeavoured to secure the resignation of the Ministry by refusing its Budget, with the exception of those most necessary supplies without which the public services could not be maintained. The Landsting rejected the mutilated Budget, and again Estrup dismissed the Rigsdag. The Ministry then persuaded the King to agree to a provisional Budget. This procedure appeared to be perfectly constitutional at the moment, as it was provided in the law of July 28th, 1866, that when the two Houses were not assembled the King could, when advised by his Ministers, issue provisional Bills, to be submitted for ratification to the new Parliament as soon as it met.

When the Folketing reassembled six months later, the Democratic parties split up into two main groups, one of which was more moderate than the other, and which entered into an agreement with the Ministry relative to the less contentious items of the Budget. The other group constituted itself into the Radical party, bitterly opposing Estrup in what it regarded as his arbitrary and unconstitutional methods. The succeeding years are filled with the records of the quarrel between the two groups of the Left. The Ministry

meanwhile took advantage of these Democratic differences to carry through a new military law of great importance.

In the elections of 1881 the two Left wings united against the Estrup Cabinet, and, gaining a renewed victory at the polls, came back to the Folketing with the avowed determination of overthrowing the Ministry. Every proposal of the Conservatives was automatically referred to the "burial committee," a similar procedure to moving that the Bill "be read this day six months." The Budgets were denuded of all but the most essential items, and the Cabinet found it utterly impossible to obtain anything of a special character from a Folketing bent on its destruction. In the elections of 1884 Estrup found himself with but nineteen out of 102 seats. It was in this year that the Socialists first acted as a united party, gaining two seats in Copenhagen.

The general opinion now prevailed that the Prime Minister would at last resign. Instead, he astounded his enemies and gratified his friends, not only by retaining office, but by indicating his contempt for the Folketing by at once giving the portfolio of war to General Bahnson, a strong defence man. The Folketing retaliated by throwing out the new War Minister's first statement, and by refusing every item in the Budget relating to fortification or defence. Accordingly, Estrup issued a second provisional Budget, which this

time contained not only the provisions for the maintenance of the public services, but in addition such special items as the Prime Minister considered necessary for other purposes. His defence of his action was characteristic but unsound. He claimed that, as he had accepted responsibility from the King for the finance of the year, he was justified in obtaining by any means within his power, constitutional or unconstitutional, the supplies which the Cabinet deemed necessary.

This second provisional Budget excited a storm of opposition throughout the country. Several Radical members were imprisoned for violent and inflammatory speeches. In the autumn of 1885 an attempt, which fortunately miscarried, was made upon the Premier's life. The Rigsdag was again dissolved, and several new decrees followed. The police force in Copenhagen was materially strengthened, while it was strictly forbidden to buy or carry weapons. Incitements against the Government were punished with heavy fines or terms of imprisonment.

In the following years until 1894, provisional Budgets were issued annually. They contained votes for military and defensive purposes, which were not carried by Parliament, but which Estrup nevertheless made effective. Thus, in the teeth of fierce opposition, this remarkable politician succeeded in fortifying Copenhagen by land and sea. His claim to recognition as a statesman of

the first rank is based, however, not only on his prolonged and successful struggle with the Danish Folketing, but also upon the many excellent social laws which he succeeded in carrying. Among these may be mentioned the Acts providing old-age pensions, sick-clubs, and regulation of parish relief. The Radical parties throughout opposed these Bills, but only on the ground that, if they were passed, they would serve to delay the ultimate resignation of the Ministry.

In 1892 the extreme Radical group lost ground somewhat. Count Holstein-Ledreborg retired from political life, Berg had died shortly before the elections, and Hörup was defeated by Alberti, who belonged to that more moderate wing which favoured a compromise with Estrup. There followed the reconciliation of 1894. The two Houses agreed upon a Budget which satisfied the Ministry, and the provisional laws were subsequently rescinded. Shortly after the reconciliation Estrup resigned. He had carried on the government for nineteen years under unparalleled conditions. Inspiring the strongest regard and admiration among his followers, he was at the same time the best loved and the most hated man in Danish politics. He lived in retirement for many years, a life member of the Landsting, to which he had been personally nominated by the King, and on his death, in December, 1913, the older Conservatives were still quite blind to his errors, while the

most fanatical members of the Left regarded him as the great animal of the Apocalypse. Perhaps the best that can be said of him is that he did not retire until the moment of triumph. He remained to defeat his enemies, and then, when there was no more fighting to undertake, withdrew into a dignified and merited retreat.

Following Estrup's retirement, three moderate Conservative Ministries succeeded each other, but the Right steadily lost ground until, in 1901, they retained only eight seats out of 114. Count Frijs, himself a Conservative, then demanded in the Landsting the resignation of the Conservative Cabinet, and the formation of a Left Ministry. This demand was immediately conceded, and Denmark obtained her first democratic government.

Herr Deuntzer, a lawyer, became Prime Minister. He was quite a new man to political life, and the real forces in the Cabinet were J. C. Christensen, the Minister for Education, and Alberti, the Minister for Justice. The Cabinet possessed an overwhelming majority in the Folketing, but were in a minority in the Upper House. The new Ministry at once proceeded to reform the system of taxation. New taxes were levied, and old imposts revised. The tithes on the land were converted and abolished. Attempts were made to cut down military expenses, and a committee was appointed to see if this was practicable.

In 1904, the Minister for War, General Madsen, asked for increased supplies with a view to strengthening the sea defences of the capital. A section of the Government's supporters criticised this demand on the ground that so long as the committee of 1902 was working no additional expenditure should be incurred. As a result the party divided, and in 1905 Deuntzer resigned.

The new Cabinet was formed by Herr (afterwards Sir) J. C. Christensen.* Alberti still retained the portfolio of justice. The Ministry was supported by the moderate groups of the Left, and opposed by the Radical-Socialist wing. The so-called "flogging law" was passed for certain grave assaults. The tariffs were revised. Labour exchanges were created.

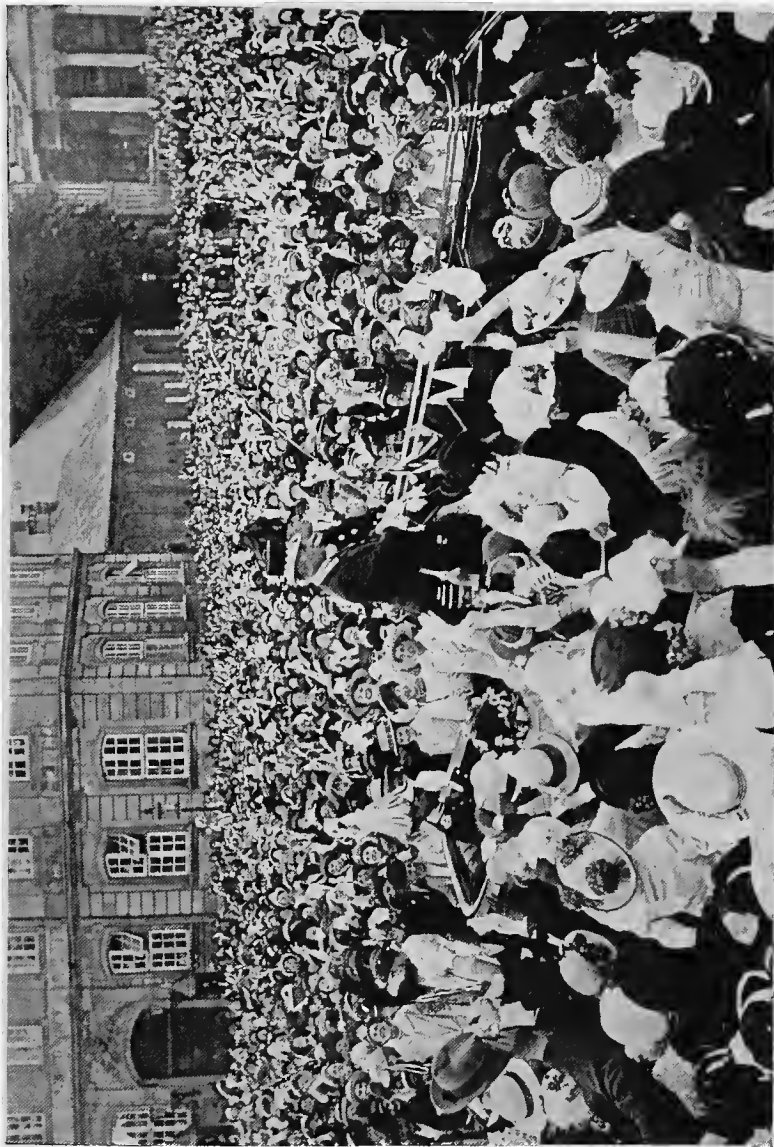
In the spring of 1908 public attention was mainly concentrated on the Alberti affair. The Minister of Justice had for some considerable time been the subject of innuendoes in the Folketing concerning his administration of the funds of the Sealand Farmers' Savings Bank and the Danish Butter Export Company, of both of which companies he was the chairman. The Copenhagen press openly hinted at falsification of accounts, and did not find it difficult to substantiate charges of nepotism, but the Ministry stood firmly by its member and refused an investigation. Alberti, moreover, was

* Herr Christensen received his knighthood from King Edward VII.

upheld by the immense authority which he wielded over his party. At length, the charges gathering weight and finding his position in the Folketing untenable, he resigned, when he was decorated by the King with the highest possible Danish order. This latter was intended as a demonstration of the voluntary character of his resignation. But six weeks later Alberti denounced himself to the police for fraudulent misappropriation of the funds entrusted to his management. The amount of the defalcations exceeded £1,000,000, the greater proportion of which had been lost in mining speculations on the London Stock Exchange. The frauds extended over a number of years, and had been cleverly concealed by juggling balances from the account of one company to that of the other, a plan rendered more easy of accomplishment by the fact that the two concerns presented their respective balance-sheets at different periods of the year.

The resignation of the Cabinet which occurred almost immediately was caused partly in view of its support of its ex-Minister, and partly because the Prime Minister, Herr Christensen, had during a short period acted as Finance Minister, and granted the Sealand Farmers' Savings Bank a loan of £85,000. It was therefore felt that the Cabinet was too deeply involved in the crisis to continue the government. The new Ministry was formed by Neergaard, the leader of the moderate group.

The Alberti affair naturally occupied the greatest



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The King of Denmark leaving the Amalienborg Palace on 30th June, 1915, after having signed the New Law which gives the women of Denmark the Franchise. He is receiving the greetings of twenty thousand women.

place in public attention for many months. The ex-Minister was tried and condemned to eight years' imprisonment. The late Prime Minister and the Home Secretary, Berg, were also summoned before the " Realm Court," the political tribunal of Denmark. The trials excited intense interest. Christensen was absolved from criminal offence, though his defence of Alberti and his persistent refusal of an examination were strongly criticised. Berg was fined for his neglect in the matter of the Savings Bank accounts, the supervision of which properly belonged to the duties of his department.

Recent years have strikingly evidenced the growing strength of the Radical and Socialist parties. Ministry has succeeded Ministry with admirable regularity. Neergaard's Cabinet retired in favour of one formed by the old Left leader, Count Holstein-Ledreborg, who accepted office only to obtain a solution of the question of national defence. The result was a compromise by which the sea defences of the capital were considerably, and the land fortifications slightly improved, while the final decision was postponed to 1922. This was followed in 1909 by the Zahle Ministry, which was more Radical in complexion than any of its predecessors. In 1910, Berntsen* became

* Berntsen, who belonged to the Left party, introduced a Bill for a new Constitution, which was received enthusiastically by Radicals and Socialists. It gave votes to all men and women over twenty-five years of age, abolished all privileges of the

head of the Government, and in his turn was succeeded by the second Zahle Cabinet in May, 1913. At that election the Radical-Socialists swept the country, and accepted office for the second time.

In completing this slight review of the development and present position of Danish politics, it may be remarked that a political career in Denmark does not afford the scope obtainable in a larger country, neither does it require the same ability to rise to a position of eminence. The lines of demarcation are mainly as between Liberals and Socialists. There is no Conservatism in the English sense of that word, because there is no aristocracy, and but few vested interests. There exist, moreover, no strong party cries, no Imperial questions, and but few matters of high foreign policy. In these circumstances it is hardly surprising that Denmark's greatest men are not often to be found among her politicians ; rather must we turn to the realms of science and art, of culture and education.

wealthy classes, and restricted the election to the Upper House to people over thirty years of age. At first the Conservatives opposed the measure, but the election in May, 1913, having given the Radical-Socialists a majority in the Lower House, Zahle carried the Bill through to the Upper House. When the European War broke out in 1914 the more Conservative elements in the Radical block thought so important a Bill should not be forced at that critical moment against the desire of a large section of the electorate. Nothing was done, therefore, for some time. The country, however, has been surprised recently to learn that, consequent upon negotiations between the Conservative and Radical leaders, the former have accepted the Constitution, which has now support from all parties, and will be signed by the King on June 5th, 1915, the anniversary of the First Constitution.



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Queen Louise Bridge, Copenhagen.

PART III
AGRICULTURE AND FARMING

CHAPTER VII

THE SYSTEM OF LAND TENURE

Danish Agriculture a Hundred Years Ago and To-day—Causes of the Improvement—The Alliance between Scientist and Farmer—Conditions—Land Ownership prior to the Nineteenth Century—Community of Ownership — Villenage — Ecclesiastical Tithes—Scheme for Abolition of Tithes—Villenage Abolished—Sale of Entailed Estates—Peasant Proprietorship—Tendency to Small Holdings—Effect of the Growth of the Factory System—The Land Laws—Small Holdings the Vindication of a Great Economic Law—Retrograde Movements — Middle-class Holdings — The Acts of 1899, 1904 and 1909—Arrangements for Repayment of Loans—The State Schemes—The Small Holdings Selection Board—Objections to the Danish Small Holdings Act—Present Conditions of Farm Labourers in Denmark—Loans on Small Properties—Mr. Christopher Turner's Examination—The Future.

LESS than a hundred years ago agriculture in Denmark was no whit more developed than in any other country in Europe. To-day the Danish farmer takes his place as one of the most scientific farmers of the age, while Denmark is, *pro-rata* to its area and population, almost the greatest grower of farm produce that history has seen. What is the cause of these astonishing facts? The answer is threefold: (1) a favourable system of land tenure, (2) advanced and well-developed methods of co-operation, and (3) a close alliance

between the theoretical scientist and the practical farmer, the laboratory and Mother Earth. Denmark is a striking example of what immense things can be done, even with poor material, by combining energy with thought, work with science. The land in itself possesses little fruitfulness. It is neither rich in soil nor great in area. There are vast expanses of barren downs, especially in the northern and western parts of Jutland, which subtract from the average productivity of the country. Its climate is much the same as that of Ireland, and if all the constituent factors are examined by those qualified to judge, it can be easily ascertained that the natural conditions in Denmark are not such as in themselves conduce to great results. Inland there are degrees of frost on as many as 116 days in the year, while the coast strips have 90 days of frost per annum. The number of days upon which both rain and snow fall is on an average 156 in the year, while snow only falls on 34 days. There are 94 days of fog or mist per annum, and, on the average, 1,200 hours of sunshine yearly. Practical farmers will agree that these facts do not account for the results that have been achieved. By what artifices then have the Danish farmers overcome, in a great measure, the disadvantages of their meagre inheritance, and been enabled to wring such an extraordinarily fine return from their soil?



Until the close of the eighteenth century the land remained in the absolute possession of a minority of large landowners, who let it, in most cases on unconscionable terms, to the small-farmer class. The properties of these latter were so split up that a system termed "community of ownership" had to be devised as the only means whereby a living could be made. This system provided that, when within a given area one tenant farmer desired to sow corn all the other farmers in the same area must likewise do the same, and on the same day, it not being practicable for one man to grow rye on his small patch while his neighbour produced barley or wheat.

Moreover, at this time the small properties were burdened with villenage to the greater, the tenant of the former paying in *labour* for the use of his land. It will readily be perceived that such labour would be required by the manor at times when the small farmer could ill spare it, *e.g.*, the harvest, when he ought to be managing his own property rather than working for his overlord. Finally, there were the ecclesiastical tithes, from which the land is not yet quite free, although they are now being converted under the following generous State scheme. An Act of Parliament provides the payment of a capital sum amounting to twenty-five times the average of the tithe for the previous ten years. Of this the Government is paying seven twenty-fifths and the farmers

themselves eighteen twenty-fifths, which the State will loan to them. The State has issued bonds which in $55\frac{1}{2}$ years will be completely cancelled, when all the farmers' loans will have been repaid.

In the nineteenth century great strides were made in the direction of altering the system of land tenure, of abolishing villenage, and of converting the tithes aforementioned. Proprietors of entailed estates were allowed by law, and even encouraged, to sell portions of their lands to their tenants, while the State did all in its power to assist the latter with their purchases. The moneys received by those who thus sold entailed lands were not wholly at the disposal of the seller. He was compelled to invest the greater part in what we should call trustee securities, which investments were then entailed to his heirs in precisely the same manner as the land had previously been. But he was permitted to retain for his own use 12 per cent. of the proceeds provided he sold to his own tenants or their kin, and only 8 per cent. if he dispossessed the tenants and sold to outsiders. And in this manner it has come about that the Denmark of to-day is largely a country of small peasant proprietors. In the last fifty years some 10,000 farms have become the absolute property of their holders, and at the present time only 27 per cent. of the area of Denmark is burdened with rent.

With the growth of the population we find an

inevitable tendency to smaller and smaller holdings. At the end of the seventeenth century the bias was, if anything, in favour of large estates. To-day it is increasingly in favour of the small to medium class. An examination of the successive land laws demonstrates the gradual change that took place in public opinion consequent upon the great change in the conditions of life, the rise of the factory system, the migration to large towns (especially in England), and the creation thereby of Denmark's principal market.

Let us now briefly indicate the legislative Acts which, in the establishment of a successful class of small holders, have tested and vindicated a great economic law. In 1769 an Act was passed prohibiting free yeoman farmers from merging their properties into the adjoining estates. This is, in itself, evidence of the fact that by the middle of the eighteenth century a desire existed to preserve medium-sized as against great estates. In the same year it was forbidden to divide farms into smaller portions than would each provide an ample living for one family. In 1848 it was strictly prohibited to lease small holdings on condition that part of the rent should be paid in labour (villenage). In 1875 Credit Union Banks were founded with State aid, in order to assist the small holders to purchase and develop their land. At the same time inducements were offered to those small holders who worked their properties skil-

fully and produced good results, while grants were made for study and travel purposes.

About 1890, however, a slightly retrograde movement set in, caused by the existence in the country of two classes of peasants : first, the young farmers who had all along worked for the manors, and who now either emigrated to America, or came into the big towns to make a better living ; and second, the small holders who were supporting themselves upon their properties, and who would not therefore work on the larger estates. The owners of manors were, therefore, in great need of workers, and in order to obtain them they demanded that the State should create small holdings so scattered and minute that the owners of them would be forced to work for others during a portion of the year. At the same time the peasants demanded holdings large enough to *fully* support them. To solve the difficulty a compromise was effected whereby a middle class of holding was created, which gave the small farmer scope to earn a large portion of his living, while at the same time requiring him to perform a certain quota of work upon the larger estates.

The particular laws relating to small holdings provide instructive reading in that they show clearly the manner in which the Danes have attempted to overcome the difficulties inherent to a system of land tenure where the owners are largely peasants requiring to be carefully watched

and controlled. In the successive Acts of 1899, 1904, and 1909, the following are among the conditions upon which a candidate is admitted to a small holding. His age must exceed twenty-five years but be less than fifty. He must previously have worked upon a farm for at least four years. He is required to furnish a guarantee from two persons of standing that he is an industrious, sober and proper person, and considered capable of managing such a property. He must show sufficient means to work the farm reasonably, while not at the same time possessing such capital as would enable him to purchase the holding without assistance. The minimum area of these farms is fixed at $2\frac{1}{2}$ acres, and the purchase price must not exceed £360, including the value of buildings, live stock, etc. The State will lend up to 90 per cent. of the total value of such properties.

The arrangements for the repayment of loans are simple and equitable. During the first five years interest only is paid. Afterwards the total loan is divided into two parts, one of two-fifths and one of three-fifths. The latter section of the loan is converted into what may be called public stock, and placed on the market with a State guarantee through the Mortgage Bank of Denmark. On the other two-fifths section after the first five years, during which he has only paid 3 per cent., the borrower must pay 4 per cent., the extra 1 per cent. accumulating as a sinking fund for the

ultimate redemption of the loan. He, however, continues to pay 4 per cent., and thus, as the loan is reduced through repayments, these repayments automatically increase in proportion year by year. When the two-fifths section has been paid off in $46\frac{1}{2}$ years, the three-fifths section is dealt with in precisely the same manner, the complete loan being repaid in 98 years.

Annually about £222,000 is loaned to small holders, and £14,000 to small holders who are at present tenants, but who desire eventually to become the owners of their properties. It was found at first that the State schemes in this direction commanded no confidence, and that the annual parliamentary grant was more than sufficient for the purpose. Now, however, the grant is heavily applied for every year, and it has, in fact, become necessary to select the most suitable candidates from among the applicants. A board has been formed with this object in view. The number of small holdings created under the Acts up to 1912 is 6,275, and the Treasury has lent already well over £1,600,000.

Of those small holdings now in existence 27 per cent. of the owners were between the ages of twenty-five and thirty when they acquired them, 43 per cent. were between thirty and forty years, and the remaining 30 per cent. exceeded forty years. There are on an average five members to each family. It has been found that the small holder works roughly 155 days in the year either on the

great estates or in some other kind of handiwork. In other words, his holding only provides him with one-half of his annual income. The general tendency, however, is for the properties to become somewhat greater, while the necessity to work on the estates is of course proportionately diminished.

The objections to the scheme which one generally meets with in Denmark are chiefly confined to the quality of the soil and its high market price. In many places the land would be quite without production were it not for the wonderfully intensive methods of the Danish farmers, and it is therefore often urged that in these circumstances Denmark is a country better suitable for the large farmer with capital than for the small holder. It will be found, however, that, although the average price of land has increased by 53·8 per cent. since 1870, the annual value of the harvest has during the same period increased by over 100 per cent. Moreover, it is the worst parts of the country, the north-western districts of Jutland, which have benefited by the change in the system of tenure and the introduction of intensive methods. Lands which were formerly barren wastes, yielding nothing, now provide livings for hundreds of families.

There is of course a great temptation for the large estate owner to get rid of his worst land to the small holders. This difficulty has been met and to a great extent overcome by means of land purchase societies. A number of people desirous of obtaining State small holdings will combine

together, forming a society for the selection and purchase of good land. The Treasury is prepared to grant loans to such societies on somewhat similar conditions as to single small-holders. The State will also aid an individual member of the society, provided the value of his holding does not exceed £665. In the period 1885—1895 the mortgages amounted to 54 per cent. of the total value of properties sold. In the last five years the percentage has only been 50, which indicates not that the absolute burden on the land has been diminished, but that interest requires a less proportion of the annual profit than formerly. The number of agricultural bankruptcies has been 12 per cent. lower than the figure for the preceding eight years, and the number of properties sold by compulsory auction 40 per cent. less. The value of horses, cattle, machinery, etc., has increased by 43 per cent. in the last fifteen years.

It has been found that the small holdings often attract an inferior type of peasant, for a really skilful agriculturist finds no difficulty in securing a property much greater than that which he could obtain under the State scheme.

It was feared at first that the small holdings would draw the servants and retainers from the large farms and manors, leaving these latter entirely without labour. But experience has shown this fear to be groundless, and Denmark now possesses in the children of the present small

holders a rising generation who will form a class of labourers produced and nurtured on the soil, and accustomed to farm work from their infancy, and who will in their turn work on the farms until such time as they are themselves able to acquire holdings.

By many economists the amount which an applicant for a State small holding has to furnish—namely, 10 per cent. of its total value—is considered to be too small, for if in the first few years of possession he suffers any heavy loss, it is exceedingly difficult for him to make a recovery in the face of a 90 per cent. State mortgage.

Notwithstanding these objections to the scheme, it certainly has a balance of argument in its favour, and there can be little doubt that it has been one of the factors which have helped to raise Danish farming from imminent bankruptcy to a position of economic security. We do not claim that Danish small holders are superfluously wealthy, but comparing the present with the former state of affairs, it cannot be denied that the Danes have achieved a great and magnificent piece of work in the solution of their land problem along the lines outlined in this chapter. The position of the agricultural labourers of Denmark compares very favourably indeed with that of their fellow-labourers in other countries. A farm labourer can make from £30 to £33 a year, exclusive of allowances of milk, etc. Those most familiar with the home life of these

people are agreed that they enjoy superior clothing, much better food, and more favourable conditions than the same classes in England, France, or Germany. A small holder is of course in a decidedly better position than a landless labourer, for he has his garden and stock. The Savings Banks show that, whereas a landless labourer saves nothing, a small holder whose family is not too large *can* save, and often does, the while his debt decreases, and his property appreciates in value. In the majority of cases when a small holder eventually sells his property, he has something in hand after he has repaid the balance due on his mortgage, showing that he has earned more than a bare living from his labour. A small holder can make up to £18 per annum when working on the great estates, which is more than sufficient to pay the interest on his mortgage.

A great deal of misunderstanding exists as to the amount of loans on Danish small properties and the effect which such apparently tremendous mortgages will ultimately have economically. In this connection it should be remembered that in no other country can money be obtained so cheaply, or on such favourable general conditions, as in Denmark ; and loans are commonly taken because the farmer knows he can make more than the interest he will have to pay. Mr. Christopher Turner, the author of *Land Problems and National Welfare*, in a letter to one of the writers, deals with

this point. We venture to insert a short extract. He states: "I cross-examined a good many Danish farmers about their mortgages. My impression is that they were all making such good interest on the money they borrowed that their borrowing was a very good business. In this country we do not realise that there is borrowing *and* borrowing; that if you borrow at 4 per cent. and make 10 per cent., it is very good business indeed."

Summarising, the cumulative effect of the succeeding land laws has been to make Denmark a land of small and medium properties. One half of the area is appropriated to farms of between 38 and 150 acres. The total number of farming properties is 250,000. Of these only 800 have more than 600 acres; 1,600 possess between 300 and 600 acres, while 116,000 own less than eight acres apiece. The Act of 1906 divides properties into manors, farms and small holdings, and fixes minima under which the two first must not come. Politically the country has during the last twenty years been governed by the owners of medium properties.

It is, of course, impossible to foreshadow future developments, but the remarkable growth of co-operation in Denmark and the splendid machinery for such purposes which already exists in that country possess a real significance in the eyes of those best able to judge. It is hardly likely that

the actual system of land tenure will change from peasant proprietorship to State ownership. But it is more than probable that a few years will witness extended co-operative small ownership, with controlled markets and a pooling system of profits. This is already the case to a large degree in dairies, slaughter-houses, and machine-buying societies; and we believe that the present trend will continue, uninterrupted by any violent change to any system of collective or socialistic ownership. Its results, at any rate, justify such an assumption.

CHAPTER VIII

A TYPICAL DANISH FARM AND CO-OPERATIVE DAIRY

Absence of Fences—Pegging of Cattle—Farm Buildings—
Diesel Motor—Stables—Overheating of Cow-byres
—Scientific Control Association—Piggery—Mr. Pon-
toppidan's Farm at Aarhus described by Sir H. Rider
Haggard—Poultry Yards—Specimen Rotation—
Manure Tanks—The Co-operative Dairy.

THE traveller on approaching a Danish farm, or when travelling through farming districts, will be struck by the almost entire absence of fences. This may be one of the reasons why cattle, and even sheep, in Denmark are not allowed to wander freely over the fields, but are pegged down within certain restricted areas. But the chief reason for this practice is that it is economical and secures an even manuring of the field.

The farm which we have selected to describe is situated near the sea-coast and within four miles of a country town in Jutland. The house of the farmer and the buildings together form a square round an extensive courtyard paved with cobbles. The buildings are thatched, but the house, built in the Dutch style, possesses a tiled roof. The whole farm, outhouses included, is lighted by electricity, and you can hear the steady throb-throb of the Diesel oil-engine motor which produces the current and is used for pumping,

threshing, milling, and a number of other purposes incident to the life and work of the owner.

The stables are lower than is generally the case in England, and the temperature is considerably higher. But experience has proved them to be not unhealthy. The same remarks apply to the cowhouses. Many foreign agriculturists consider that in Denmark farm buildings generally, and cow-byres especially, are kept too warm, and that the cows thereby run increased risks from tuberculosis. Theoretically this may appear to be a not unreasonable assumption, but actually it will be found that the risks are guarded against in other ways, the Scientific Control Association being particularly keen on securing the healthiest possible conditions, especially for cows supplying drinking milk to towns. In other cases, *e.g.*, when the milk is designed for butter-making, it is taken to the co-operative dairy, boiled and sterilised, and thus the danger of infected milk is obviated.

Most Danish farmers milk their animals three times a day. The cows generally lie two in a stall, and over each is placed a specification chart stating its average yields of milk, the amount of foodstuffs it consumes daily, the dates of calving, and a variety of other information required by the inspectors of the Scientific Control Association. The milking is mostly done by an ingenious machine, though, when the animal has been partially emptied, the operation is concluded

by hand in order, as it is termed, to "dry" or "strip" the cow.

Near the cowhouse is a barn of unthreshed grain. Stacks are only rarely seen in Denmark, corn and hay being generally kept under cover and not stacked. The piggery is between the barn and the poultry yard. In another chapter we have related how pig-farming came to be carried on to such an extent in Denmark, and how it has been found possible to make it, perhaps, the most profitable side of Danish farming considered in relation to time and outlay. One of the most remarkable swine farms in the world is that of Mr. Pontoppidan at Aarhus, in Jutland. Sir H. Rider Haggard, after his visit to Denmark, in 1910, to observe the general conditions of Danish agriculture, described this particular farm in terms which showed that it had impressed him greatly, and we therefore venture to quote the most interesting portion of his description. He writes: "Mr. Pontoppidan breeds all his own pigs, which in race are Danish crossed with Yorkshire. His sows are only allowed to produce five or six litters, after which they are fattened up to a weight of from 400 to 500 lbs. Danish. Observation has shown him that after five or six litters the sows both eat and overlie their offspring; also that the pigs born between the second and the sixth litters are the strongest and do the best. His principal feeding-stuff is maize, but he also uses broken wheat or rye from the English

and Black Sea mills, 500 lbs. of skim milk daily, turnips, kohl-rabi, swedes and mangolds. Lastly, the fatting pigs receive, amongst their other foods, all the blood from the Aarhus slaughter-houses, which is pressed into cakes and mixed with salt and borax. Of these cakes, that are stored in racks, nearly 1,000 lbs. are used every day. Their cost is three-eighths of a penny per lb., and they contain about 35 per cent. of albumen.

“ The pig-pens are arranged in a large, round building, and in all my agricultural experience I have seldom seen a more remarkable sight than they afforded. First we went upstairs, where live the young pigs which are being ‘grown on.’ As we appeared among these, hundreds of heads and forelegs were thrust over the tops of the sties, and from hundreds of hungry throats rose a chorus of piercing yells. Indeed, the din was so tremendous that I was glad to escape from the place. On the ground floor were the pigs whose earthly career was drawing to an end, many of them being already marked with the fatal black spot which indicated that on the morrow they must make their first and last journey—to the slaughter-house.

“ At that date pork was, and, I believe, still is, fetching a price in Denmark that at present makes its breeding there a most remunerative business—no less, indeed, than 5*d.* per lb. This is paid for the animal as he walks on the scale, and for that reason it is customary to feed a pig as heavily as

possible on the morning of his departure. He is given an opportunity of satisfying himself with every dainty before he dies, and as he reckons not of the future, his appetite rises to the occasion. At $3\frac{3}{4}d.$ (30 öre) per lb., pork production is fairly remunerative; while $3d.$ (24 öre) per lb. covers all outgoings and risks. The average cost of a pig from the hour of its birth to that when it enters the bacon factory, including an allowance for labour, rent, and every other expense, is here reckoned at £2 9s. $10\frac{1}{2}d.$ (45 kroner), and the average price it realises is £3 6s. $6d.$ (60 kroner).

“In another part of the piggery are kept the great drop-eared boars and the new-littered sows. Here the piglings are weaned by means of an ingenious contrivance of wooden bars, behind which they are confined, only being allowed to the mother at stated intervals, which grow rarer until they are sufficiently hardened to be moved upstairs.”

Since the foundation of the various egg export corporations the poultry yard has become an increasingly important and valuable asset to the Danish farmer, and on the farm which we are describing fowls, turkeys, and geese take up almost the sole, undivided attention of two women and a boy. As the farm is near the sea-shore, the birds are fed on seaweed, grass and green fodder. Seaweed is often also used as a manure in the orchards, being packed tightly round the roots of

fruit trees, and serving the double purpose of keeping them cool and damp.

The majority of Danish farmers work their land on a seven-year rotation. In different parts of the country the actual order of crops, of course, varies, and it depends largely on the nature and quality of the soil, but the following, which is the rotation of our farm in Jutland, may be taken as a fair specimen : (1) oats sown down with clover, (2) mixture of oats and vetches, (3) fallow, (4) barley, (5) wheat and rye, (6) beet, and (7) oats sown down with clover again.

The inspection of the farm will be concluded by a glance at the great manure tanks, the importance of which has been emphasised in another chapter. On very large farms the capacity of these tanks varies from 1,500,000 to 4,000,000 lbs. Danish ; on middle farms and on small holdings tanks of a much more moderate capacity are of course employed.

About a mile away, across the fields, you can just catch a glimpse over the beech trees of the tall factory chimney of the co-operative dairy. Every morning the dairy collects the milk from all the farms in the district. This is weighed on a machine which registers automatically. The milk is then filtered, warmed and separated, the skim being run into a cylinder, reheated, and transferred to a large tank. After weighing out, three-quarters are returned to the co-operating members and the

balance retained by the dairy for manufacture into cheese.

A visit to a Danish co-operative dairy—such an one, for example, as the Trifolium at Haslev, the largest and most wonderful of its kind in the world—provides the most striking evidence of the immense advance which has been made upon the simple and Arcadian methods of a quarter of a century ago. The multitude and variety and the extraordinary ingenuity of the machines employed and the order, swiftness of operation, and scientific precision of the whole work would astound and bewilder an old-fashioned farmer from, say, Wiltshire or Dorsetshire. For there is little of sentiment and nothing of leisure or tradition about modern Danish farming; it is as scientific as a chemical reaction.

CHAPTER IX

PURE MILK IN THE LARGE TOWNS

Busck Milk Supply Company of Copenhagen—Testing and Preparation of Milk—Decrease in Infant Mortality — Distribution — Comparison with English Methods and Prices—A Suggestion to Municipalities — Pasteurisation—Comparison of Food Values of Milk and Beer—Rapid Cooling and the Hygienic Milk-pail.

NEARLY every large town in Denmark possesses a company or corporation, partly philanthropic in its aims, which exists to supply the populace with pure milk and cream at the cheapest possible rates. The most remarkable of these concerns is the celebrated Busck Milk Supply Company of Copenhagen, which has a capital of about £25,000. It never distributes more than 5 per cent. in dividends, although there is little doubt that, were it run as a business concern, it could easily earn 20 per cent. profit or more. The excess over and above the 5 per cent., however, is devoted to improvements and additions to machinery, equipment, and buildings, and to free distribution of milk to the poor.

The company provides cream in four different grades: whole milk, half-skimmed milk, children's milk in sterilised bottles, and infants' milk

specially prepared under the most stringent precautions. No cows are kept, the original supplies of milk being obtained from selected farms in the Copenhagen district.

The milk, on arriving at the company's depôt, is tested and emptied into small vats, which are standing near a larger vat, containing a mixture compounded of one part of salt water to two parts of ice. This mixture is slowly pumped into lofty coolers, and the milk is then passed over the coolers and run into a tank, whence it is driven through a special sterilised filter made up of gravel and cloth sheets. From the filter it passes into a large clean tank, when it is ready for distribution.

The cream, which has been separated by steam-driven Alfa separators, flows over cylinders filled with ice to an ingenious machine which has six long pipes, through which it passes into sterilised bottles. Nothing—milk, cream, butter or cheese—is ever touched by the hand, and the extreme care with which the infants' milk is prepared has undoubtedly resulted in the saving of thousands of young lives, and contributed to the notable decrease in the figures of infant mortality for Copenhagen and the surrounding districts during the past thirty years.

A very efficient system of distribution has been devised by the company, and this attracted the special notice of Sir H. Rider Haggard during his inspection in 1910. He writes: "All being prepared, the milk is distributed in the following

fashion. Two hundred cans, each containing 100 lbs. Danish, are sent to the hospitals. Some goes to three shops the company possesses, while the rest is hawked by means of forty-four vans, which deliver it from door to door.

“ These vans, which I saw, are extraordinarily well contrived and adapted for this purpose. The cans of whole and skimmed milk are placed on either side of the front portion of the vehicle, and locked up in such a position that the milk can be drawn through taps which are specially protected from dust. It cannot be otherwise got at even by those in charge of the van. Over the taps are written the quality and price of the milk. In the rear compartment of the van are trays which exactly fit the cases that hold the bottles of cream and of children’s and buttermilk, the prices of which are inscribed over the door. These trays in summer are covered with a layer of ice.

“ To draw its vans the company keeps a stud of eighty horses, which I saw lying or standing, on moss litter, in beautiful stables. Not far from these stables are the ice-houses, where is stored the specially collected ice, 3,000 tons of which are used every year.

“ Much might be written about this company, but perhaps enough has been said to convey some idea of its remarkable character and the perfection of its management. It was the first society for the distribution of pure milk in the world, and I

believe that even now, although some others exist in different countries, it remains the most important. If there is anything on the same scale and organised in quite the same way even in the vast city of London, the fame of it has not reached me. I suggest that here there is an opportunity for enterprising and philanthropic vendors of milk in all the great towns of our country. Only could milk and cream thus collected and treated be sold at similar cheap rates in England? The charges made to the householder in London and other English cities do not seem to suggest that this would be the case.

“ The London price for new milk is a little under double the price for the same article in Copenhagen, whereas the difference in the cost of cream is enormous. The Copenhagen company charges 1s. 2½d. per litre for its *best* cream, or, let us say, 1s. 6d. (an outside figure) per quart, as against 4s. charged by the London dairies. Surely this is a matter that the corporations of cities might consider in the interests of the health of the population, and especially of young children. If a corporation may supply water or electricity why should it not supply milk?

“ But the matter of municipal trading is one on which I do not wish to enter. Therefore I leave this somewhat thorny question with the remark that those who are alive five-and-twenty years hence will probably see in every large town

an institution labelled 'The Corporation Pure Milk Supply Dépôt.' "

Mr. Busck's company, which started business in 1878 on hired premises, now owns 11,300 square metres of ground, of which 5,600 square metres are occupied by buildings and plant. Its daily sale of milk amounts to over 25,000 quarts, and it employs a staff of 130 men, 140 women, and 230 boys. In cases of illness all the employees, as well as members of their families, receive gratuitous medical treatment without any deduction of salary.

All the cows used by the company are examined by veterinary surgeons twice a month, while cows supplying infants' or children's milk are tested every half-year with tuberculin. The animals are kept on pasture as long as possible. Immediately after the milking operations have been concluded the milk is cooled down to 5° Celsius, but no pasteurisation is permitted, as this is now generally admitted to be an unnecessary proceeding and fraught, in some instances, with considerable risk to the public, as, although it effectively destroys the bacilli of disease, it, at the same time, reduces the nutritive properties of untreated milk.

In an article published in *MacClure's Magazine* for December, 1908, a contributor very succinctly stated that "the dairyman who pasteurises good milk is a fool, and the dairyman who pasteurises bad milk a rogue. The only excuse for pasteurisation is that it is the lesser of two evils, and the

Copenhagen Milk Supply Company has shown the world that it is unnecessary."

In the well-known American review *The Outlook*, Prof. J. E. Pope, commenting on his visit to Copenhagen in 1906, stated that in his judgment Copenhagen was the capital where milk is the best and cheapest. He noted particularly the importance placed upon the delivery of milk at a very low temperature in contrast to the common practice in America and England of delivering it warm, in which case it deteriorates rapidly.

During the past thirty years the consumption of milk in Copenhagen has increased by a much greater ratio than the proportionate increase in the population would lead one to suppose. At the present moment the average consumption equals almost exactly one pint per day per person. In London and Manchester the allowance is less than one quarter of this quantity. The abundance and the cheapness of good milk has undoubtedly contributed in no small measure to the extraordinarily rapid growth of the temperance and allied movements in Denmark, as it has been clearly pointed out in the press and the churches, and the schools, that even ordinary buttermilk contains from four to five times the food value per volume of beer. Bavarian beer, for example, contains only one half a pint food value of a quart of whole milk. A quart of Bavarian beer costs 27 öre (slightly more than $3\frac{1}{2}d.$), while a quart of whole

milk can be purchased in Copenhagen for 16 öre (about 2*d.*). From the point of view of cost, therefore, milk yields better value for money, while if the relative food values and nutritious properties are worked out it can be demonstrated that Bavarian beer, which costs 27 öre, should only be valued at 4 öre.

One of the most important of the appliances employed by the Copenhagen Pure Milk Supply Company is known as the hygienic milk-pail, the object of which is to collect and store the milk so efficiently cooled that it will keep long enough without pasteurising or other similar treatment. The apparatus consists of a cylindrical tinned steel pail, in the bottom of which is placed a pear-shaped copper receptacle, which is closed by means of a flat lid under the bottom of the pail. When the pail is in use the lid is unscrewed, the pail turned upside down, and the receptacle filled with a mixture of one part of common salt to three parts of crushed ice or snow. The cow is milked straight into this pail, and the milk thus loses its cow-heat. The micro-organisms are by this method immediately placed into an environment which precludes development, while the milk does not lose any of its nutritive properties.

This rapid cooling process has produced some very notable results. Dr. Müller, of Leipsic, instituted a series of valuable experiments with Mr. Busck's hygienic pail, of which we will quote

one only. A certain cow, which yielded 12 quarts of milk, was milked from the two right teats into Mr. Busck's pail and from the two left into an ordinary pail, the specimens being placed *side by side in bottles in a room at a temperature of 15° Centigrade*. The milk from the ordinary pail became sour and thick after 82 hours ; that from the hygienic pail did not become sour until after having been kept for 144 hours.

In connection with the rapid cooling process invented by Mr. Busck, it may be noted here that his company use upwards of 18,000 lbs. of ice daily, and that the whole of this enormous quantity is produced and crushed on the premises by a Danish Diesel oil-engine motor.

CHAPTER X

THE SCIENTIFIC METHODS OF THE DANISH FARMERS

The Key to the Success of Danish Farming—Education—Co-operation of Professor and Peasant—The Copenhagen High School of Agriculture—Fjord and Segelcke—Early Methods—Danish Cows—Scientific Control Association—Production of Milk—Export of Butter—Jersey Cows—Use of the Area of Denmark for Cereals and Vegetables—Annual Value of the Harvest—Rotation of Crops—Fertilisers—Liquid Manure—"Lucerne" Grass—Winter Feeding of Cattle—Farming Machines—Enterprise of the Young Farmers—Irrigation, Moorland Conversion and Planting—English "Model" Farms—Farming for Profit.

THE key to the success of Danish farming, indeed the key to the success of all Danish enterprises, may be found ultimately in the question of education. A century ago the men who were leading Danish policy perceived with admirable foresight that Denmark could only be great if her peasants were given a free and liberal education, and to this end much of the legislation of the last hundred years has devoted itself. Further, the professor has given the service of his brain to the peasant, and the peasant has responded by putting his work and the strength of his arm behind the professor's theories. There are many countries richer and more favourably placed, possessing

greater facilities, and scientific men of equal brilliance. But in no country in the world is the co-operation of university and farm so complete, so loyal, or so free from prejudice as in Denmark.

The headquarters of scientific farming in Denmark are at the Copenhagen High School of Agriculture. This institution was founded in 1858, has a staff of forty professors, and controls experimental stations in various parts of the country. All the year round lectures are given, reports received, experiments made, and assistance afforded to young farmers who are qualifying to take up holdings in the country. The school has branches devoting themselves separately to (1) agriculture, (2) veterinary science, (3) woodcraft, (4) gardening, and (5) land surveying. Students from Norway are admitted into the veterinary science branch. In addition to the above subjects, lectures are given on physics, mineralogy, chemistry, botany, zoology, soil composition and fertilisation, farming machinery and its uses, treatment of domestic animals, pathology of plants, and book-keeping for farmers. Observational tours are periodically arranged. The ordinary course at the school lasts from two and a half to four years. The fees amount to only £5 a year, while there are several scholarships of from £12 to £24 per annum. The principal and professors constitute the governing body of this very successful institution.

The school has possessed from its inception a

staff of scientific men of the first rank, and it had the good fortune at the very outset of its career to win the confidence of the farmers. Mention has already been made of Profs. Fjord and Segelcke. The former was the first lecturer in physics which the school had. He had been a schoolmaster, but devoting his attention to the study of bacteria in meat, milk, and other dairy products, he soon realised the importance of applying scientific methods to farming matters. He carefully reviewed the position of Danish farming from both scientific and economic points of view, and to him is largely due the credit of conceiving and inaugurating that splendid machinery of co-operation which raised Danish farming from imminent bankruptcy to its present sound and healthy condition.

Before the time of Fjord and Segelcke the farmers kept no records or accounts. They worked on no principles other than those of tradition or personal prejudice. The dairymaid and the farm hand were neither watched nor controlled. The presence of harmful ingredients in milk or butter, if suspected, was never prevented, while the use of the thermometer was almost unknown. Yet to-day a Danish farm is a scientific machine as nearly perfect as it is humanly possible to be, a machine in which the possibility of error is all but eliminated.

It is out of the question in a book of this scope to deal fully with this important side of Danish

farming, or even to provide an outline of the many experiments which have been made in and through the agricultural institutions of Denmark. The matter is largely of bacteriological and chemical interest, and belongs, therefore, rather to a scientific than to a general work. But some brief indication of the intensely scientific nature of Danish farming will not be out of place here.

Practically all Danish cows are kept in stables for the greater portion of their lives. Many of them indeed are lifelong prisoners. The sheds are built in a large and airy style, and the atmosphere within them is just as pure as the air over the fields. For exercise the animals are taken to be watered once a day. On some farms the cows are allowed a limited amount of open-air pasturage, but only in the summer from June to September. The effect of rain and cold on the yield of milk is known to a nicety. Those fortunate cattle which are placed on the fields in the summer are tied to stakes with a range of but eight yards. When the stakes are removed and transferred to another quarter of the meadow, the farmer is careful to observe that all the clover has been eaten.

An inspector from the Scientific Control Association visits the farms once every three weeks. The assistants who do this work are specially trained men or women. Each cow is examined, its yield of milk, the percentage of butter fat, the amount of fodder consumed, are analysed, and the surplus

calculated. It is thus possible for each farmer to know precisely how each cow pays him and further to compare his animals with those of his neighbours. As soon as a cow ceases to pay it is fed up for the butcher.

It has been shown that a Danish cow yields, on an average, 2,617 kilograms of milk, and this figure is rapidly increasing. In 1899 the average yield was only 2,100 kilograms. The cows from small properties give slightly more than those from the larger estates. The production of milk in Denmark now exceeds 2,875,000,000 kilograms annually, representing a value of £16,000,000. The export of butter in 1911 was 89,500,000 kilograms, giving a value of £10,500,000. Cheese is not exported to any great extent, as the higher prices received for butter yield handsome profits.

The Jersey cows, which were originally imported for their rich fatty milk, have not yet become accustomed to a confined life. They contract much tuberculosis, and also suffer greatly from a painful stomach complaint. It is hoped, however, to acclimatise them after further experiment. This innovation is being carefully watched by the cattle-breeding associations.

The following table shows the use of the area of Denmark for cereals and vegetables :—

	Per cent.		Per cent.
Wheat . .	1.00	Barley . .	6.00
Rye . .	7.10	Oats . .	10.40

	Per cent.		Per cent.
Seeds . . .	4.40	Buckwheat . . .	0.20
Potatoes . . .	1.40	Spurry . . .	0.10
Carrots . . .	0.20	Fallow . . .	5.90
Beetroot . . .	2.20	Garden produce	0.01
Kohl-rabi . . .	1.90	Tobacco . . .	0.002
Turnips . . .	1.80	Clover and grass	7.600
Sugar beet . . .	0.70	Clover and grass	
Chicory . . .	0.02	(not for har-	
Podding grain . . .	0.30	vest) . . .	12.100

The annual value of the harvest is more than £35,000,000, being on an average £5 5s. an acre for corn-land, £11 13s. an acre for roots, and £3 an acre for hay. For small holders the cultivation of roots is found to pay better than anything else, inasmuch as the labour falls in a more convenient period of the year.

The crops, as we have already explained, are rotated, grain with roots. As fertilisers nitrogenous foods are mostly used. These are purchased either in England or Germany. Chili saltpetre, superphosphates, and kali, a mineral product from Salzburg, are extensively employed. In addition, great use is made of natural manures, both liquid and solid. A Danish farmer values his reservoirs of liquid manure as much as his separated milk. The reservoirs are built of cement, and are air-tight. The liquid manure is chiefly employed for potatoes, sugar beets, clover and grass.

A special species of grass known as "lucerne"

is cultivated. This is grown in fields outside the rotation. Hay is cut from it some three or four times a year. A field of "lucerne" ^{alfalfa} lasts about three years. The cattle are not pastured on these fields, as it has been discovered that the grass grows more luxuriantly when cut. It possesses pretty yellow and blue flowers, somewhat resembling clover. A peculiar feature about this grass is that it requires the presence of certain bacteria before it will grow. This must be either bought or taken from another "lucerne" field. The soil containing the bacteria is termed "podejord." The use of "lucerne" is extending.

In the winter the cattle and pigs are fed upon the "lucerne" hay and oil-cakes. The latter are made of seeds from which the oil has been pressed. The animals seem to like it, but their pleasure is evident when the spring returns, and supplies of fresh grass and clover are forthcoming.

For such a small country the Danish farmers employ an inordinate number of farming machines. There are in Denmark, in use at the present moment, more than 32,800 seed-sowing machines ; 44,700 mowing machines ; 27,600 harvesting machines ; 65,700 threshing machines ; 4,600 wind motors ; and 83,100 reservoirs for liquid manure. No opportunity is lost of obtaining the latest farming devices, and the young farmers particularly show great originality in overcoming the difficulties which face them. One instance

which came to our notice may be cited. A small farmer in an outlying and barren district decided to take over some uncultivated and apparently hopeless land a great distance from any water supply. He had a well dug, and a pump erected with a small Diesel motor, then led the water over the new estate in lead pipes a little beneath the surface of the ground. In this manner he made himself practically independent of the rain, and in a few years the ground, which had formerly been quite barren, provided him with an ample living.

This reclamation work has also been undertaken in other parts of the country. One hundred years ago there were in Denmark some 2,200 square miles of unproductive heath-land; fifty years later this area had diminished to 2,100 square miles; to-day it is only about 900 square miles. This fine piece of work has been accomplished mainly by the Society for Cultivating the Heath, which was founded in 1866 by Herr Dalgas. Its aim was national, and from the beginning of its operations there was no thought of private gain. Its chief energies are spent in irrigation, regulation of watercourses, building of roads, conversion of moorland into meadow-land, construction of drains, conveyance of marl, and in many cases peat-making and the planting of suitable districts with trees. The society receives a subsidy from the State of £20,000 a year, and maintains nine wood-

rangers and fifteen assistants, who render help gratis to meadow owners and others desirous of planting trees on their properties. It also owns twenty square miles of coniferous trees, and has supervision over a further 200 square miles, privately owned. The results of experiments in the cultivation of bog-land are made known by means of over 500 demonstration stations.

Enough has now been written to indicate that farming in Denmark has become an exact science. It is true that we have in England many model farms much finer than anything that may be seen in Denmark, but these are for the most part owned by wealthy amateurs, to whom expense is not an important matter. On the other hand, the Danish farmer cannot afford to farm for show or pleasure. With him it is a question of profit. The demand of the young peasants when they come to the high-schools is "Show us how to make a farm pay." Accordingly, even the manager of an agricultural school must run the demonstration farm attached to the institution as a paying concern, and not for show purposes. "The best demonstration of your methods, and the finest advertisement for your theories," say the young agriculturists of Denmark, "is to make *profits* out of your school farm."



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Flower Market, Copenhagen.

CHAPTER XI

CO-OPERATION

Denmark prior to 1864—Competition—What the English Farmers did—Corn Production and “Intensive” Farming—Increase in Live Stock—Ireland, Australia and Canada—Horses in Denmark—Breeds of Cattle—Shorthorns and Jerseys—Scientific Control Societies—Bulls—Decrease of Sheep-rearing, and why—Reason for the Increase in Pig-rearing—Profs. N. J. Fjord and T. R. Segelcke—The High School of Agriculture—First Co-operative Dairy—The Position To-day—Advantages of Co-operation in Dairying—Educational Effects—Some Objections—Statistics of Co-operative Dairies—Method of Establishing them—The Part played by the Savings Banks—Weekly Settlements—Improvement in the Quality of Produce—The English Market Captured—Government Regulations—Tests of the Royal Experimental Laboratory—Co-operation in the Meat Trade—German Import Regulations—England prohibits Import of Living Cattle from the Continent—Slaughter-houses—The Egg Industry—Remarkable Development—The General Supply Associations—Co-operative Wholesale Societies—Reasons why Co-operation unpopular in Great Britain—The English Character—A Change in the System of Land Ownership Required—The Most Convincing Argument.

UNTIL 1864 Denmark was in the main a corn-producing country. Owing, however, to the growing export of that commodity from Russia and the United States, and to the keen competition caused

thereby, it became quite impossible for the Danish farmers to make corn-growing pay. In similar circumstances the English farmer had gone to his landlord and obtained a remission of rent. But this could not be done in Denmark, the farmers being their own landlords, and they were therefore reduced to the necessity of either vacating their properties or devising some new method of managing them which would yield a greater profit. In these adverse circumstances we find the origin of co-operative and scientific farming in Denmark and the cause of the complete reversal that has taken place from corn production, where the farmer only takes the absolute yield of the ground, to intensive farming, where everything that can be profitably employed is used, the land and its products are nursed and studied, nothing is wasted, and nothing is ornamental. The result has been an immense increase in live stock, in cattle, pigs, and poultry, and a consequent increase in the production of butter and the output of eggs. Indeed, so pronounced is this change that we find that, with the exception of the thinly populated countries of Ireland, Australia and Canada, Denmark possesses in proportion to its population more live stock than any other country in the world.

There are about 535,000 horses in Denmark. The Jutland breed predominates. It is a rather heavy type, exceedingly strong and eminently

suitable for rough farm work. About 20,000 of these animals are exported every year to Germany, under a customs duty of seventy-two marks each. A lighter type of horse is the Frederiksborg breed, also a strong and useful animal. Of recent years, in addition to breeding horses, the Danes have found it necessary to import them. From 10,000 to 20,000 now enter the country annually, mostly small animals from Russia, Sweden and Iceland. The imported horses are chiefly employed on the small holdings.

The Danish farmers possess some 2,257,000 cattle. Again we find two predominant breeds, the Red Danish and the Jutland, the former being a pure milk cow and the latter being used both for milking and for meat. Some short-horned cows are imported for meat only, and numbers of Jerseys for their rich, fatty milk. The Scientific Control Societies periodically inspect the farms, and discover by an analysis of the amount of food consumed by each cow, together with its yield of milk, whether or no it is paying its owner to maintain it. Immediately the point is reached at which it no longer provides a stipulated margin of profit the cow is slaughtered. In this manner the average life of a cow in Denmark has greatly diminished since the establishment of the controls, and to-day it is much less than in other countries, where animals are often maintained long after the profit stage has been passed. With regard to

bulls, many of these are only retained for one or two years, carefully fattened, and then sold to Germany as meat. The covering bulls for breeding purposes are specially selected, and are usually owned by societies.

There are now only 726,000 sheep in Denmark, and this number is continually decreasing, owing to insufficiency of pasturage and the better profits which can be made by dairy farming.

On the other hand, the number of pigs has rapidly increased. There are now over 1,467,000 of these animals, as against 304,000 fifty years ago. Even then these figures do not show adequately the immense and growing profit yielded by this side of dairy farming, for whereas formerly the average life of a pig was from eighteen months to two years, now it is killed when six or seven months old. The weight fixed by the slaughter-houses is from 80 to 100 kilograms. Such a weight is usually attained in Jutland in six or seven months ; in other parts of the country, in seven or eight months. Of late years there has been a tendency to keep fewer but superior boars.

The growth of pig-rearing was coincident with the development of dairy farming, and was largely caused by the great quantities of skimmed milk left over after the butter-making. The co-operative dairies send this back to the farmers, and, true to the new principle of using everything that can be profitably employed, they considered it better

to rear pigs on buttermilk than to waste a product of such obvious utility.

Much of the success of Danish farming can be directly traced to two scientists, N. J. Fjord and T. R. Segelcke, both professors at the High School of Agriculture. These gentlemen in the seventies directed their energies towards farm work and agrarian questions in general, though more particularly in the direction of devising methods for increasing the production of milk and the manufacture of pure butter.

One important feature of their earlier work was the instruction of the peasants in modern and scientific methods, and proving to them the value of co-operation. As a result the first co-operative dairy was opened in Jutland in 1882, to be followed in but a few years by hundreds of others. To-day there are 1,200 co-operative dairies, owning more than 1,000,000 cows, or 81 per cent. of the cows in Denmark. There are only some 222,000 cows which are not co-operatively owned.

The chief points in this system are: (1) the small farmer obtains the benefits which inevitably follow great production; (2) he has a regular weekly settlement from the dairy to which he sells his milk, and therefore contracts no bad debts, and is furthermore not compelled to be a merchant as well as a farmer; (3) he has a strong and direct inducement to produce as much milk as possible; (4) he receives a share in the profits of distribution,

being part owner of the factory which kills and disposes of his meat or of the dairy which purchases and sells his milk or makes it into butter ; (5) from the point of view of the consumer, the middlemen's profits—often amounting to as much as 120 per cent. on dairy produce—are saved ; and (6) the system has been found to be valuable from an educational standpoint.

One keen observer, who has especially noted this last point, declares that among "the indirect but equally tangible results of co-operation I should be inclined to put the development of mind and character among those by whom it is practised. The peasant or little farmer who is a member of one or more of these societies, who helps to build up their success and enjoys their benefits, acquires a new outlook. His moral horizon enlarges itself ; the jealousies and suspicions which are in most countries so common among those who live by the land fall from him. Feeling that he has a voice in the direction of great affairs, he acquires an added value and a healthy importance in his own eyes. He knows also that in his degree and according to his output he is on an equal footing with the largest producer and proportionately is doing as well. There is no longer any fear that because he is a little man he will be browbeaten or forced to accept a worse price for what he has to sell than does his rich and powerful neighbour. The skilled minds which direct his business work

as zealously for him as for that important neighbour.

“Again, being relieved from all the worry and risk of marketing and sure that whatever he buys from his society, be it seeds, or foodstuffs, or implements, is the best obtainable at the lowest rate compatible with good quality, he is free to devote himself altogether to the actual business of his life. Also in any great doubt or difficulty he can rely on the expert advice of his control society ; all the science of the country is in fact at the disposal of the humblest worker of its acres. The farmer who, standing alone, can be broken across the knee of tyranny, extortion, or competition, if bound up with a hundred others by the bond of a common interest is able to mock them all.”

Doubts have sometimes been expressed as to whether the method of co-operation will pay in the long run. The chief arguments urged against it are that the farmers often work for the greatest *gross* result, feeding their cows on the most expensive artificial foods, a practice which is certainly successful now, but which in time might conceivably end in a serious deterioration of the animals. Moreover, the day labourer, who in former times had been accustomed to receive milk from his employer either free or at greatly reduced prices, now finds that on many farms this bounty has been withdrawn in the great race after quick profits.

To guard against the misuse of the co-operative

system, and to avoid the grosser follies of ignorance, Scientific Control Associations have been formed, which send inspectors round the farms to inquire into their management. The work of these controls is spoken of in greater detail in another chapter. They receive support from the Government to an amount of some £7,000 annually.

Each co-operative dairy has on an average 164 members with 963 cows, and possesses buildings and plant worth about £1,500. The customary manner of establishing such a dairy is for a certain number of farmers in a locality to combine, borrowing the necessary capital from a Savings Bank, each farmer giving a guarantee in proportion to the number of cows he possesses. It is required by statute that the loan shall be repaid in ten or fifteen years, when the dairy must take up a new loan of the same amount as the first. This new advance is then distributed among the members in proportion to the quantities of milk they have sold to the dairy during the period of the previous loan. In this manner a loan is taken up every ten or fifteen years, and the Savings Banks are thus directly interested in the development of the dairies.

Weekly settlements are inaugurated whereby each member receives about 75 per cent. of the value of the milk he has sold, the remaining 25 per cent. being retained by the dairy and, after deduction of working expenses, handed over to the members twice a year.

Not long after the establishment of the first co-operative dairy it became apparent that a great improvement had been effected in the quality of butter produced, and within a few years Danish butter had been acknowledged by the critical English public as the finest product in the market. The export steadily increased, especially to England, and the price commanded was invariably higher than that obtained by other butters. If complaints were received from English importers or dealers, they were carefully examined, and the error was at once remedied, with the result that to-day the butter from Danish co-operative dairies possesses an unrivalled reputation and an assured market.

The Government regulations provide that butter for export shall not contain more than 16 per cent. of water, and that no other ingredient than salt shall be used as a preservative. There are several annual exhibitions of butter held under the patronage and with the financial support of the State. But the most important tests are those arranged by the Royal Experimental Laboratory, whose board periodically selects for trial purposes a certain number of dairies, which are forthwith requested by telegraph to submit a given number of samples *immediately*. The results of these tests are published at intervals, and they go to show that the outcome of the establishment of these co-operative dairies and scientific controls has been

not only to raise the quality of butter, but, in addition, to increase the number of cows and also the average annual yield of milk from each cow.

The co-operative system has also been adopted in the meat trade. Cows' flesh is exported in considerable quantities, chiefly to Germany. Formerly the living animals were exported, but in 1897 the German import regulations were made so much more strict that it became virtually possible to send there only slaughtered cattle. A slight relaxation has, however, taken place in recent years, and numbers of living cows from Denmark are now sold to the German public slaughter-houses, after having been carefully examined for signs of tuberculosis, and detained for ten days in quarantine. The reason why Denmark has no market for her meat in England is that in 1892 England prohibited the import of living cattle from the Continent, and the prohibition remains in force. As the profit from selling living cloven-footed animals is greater than when selling meat, the Danes naturally prefer to send this produce to Germany.

In 1911 the export of living cattle and meat from Denmark had a value exceeding £13,000,000, of which by far the most important part consisted of pork, the value of this section alone being £6,500,000.

The first co-operative slaughter-house was opened in 1887; seven others followed in 1888,

and now there are thirty-six of these institutions. The members are compelled to sell their meat there, even if they could obtain better prices elsewhere. In addition to these co-operative slaughter-houses, there are twenty-two private slaughter-houses in Denmark. The animals are paid for according to their weight when killed. There are not so many members of co-operative slaughteries as of co-operative dairies, largely because membership is not required as a condition of sale, yet limits the sale to the co-operative institution. The prices obtained are, however, usually so good that the Danish farmer finds it more profitable to become a member than to remain outside. The owners of 64 per cent. of the pigs in Denmark, for example, have joined this movement.

The great industry in eggs is also managed now on a basis of co-operation, although it was the last of the staple industries of Denmark to come under this beneficial influence. The largest society for the export of eggs is the Danish Egg Export Corporation, which has 48,000 members and 500 branches. The eggs are carefully tested and selected. The society fines very heavily members detected in knowingly or carelessly selling bad eggs. There can be little doubt that the co-operative movement has been of incalculable benefit to this industry, and has been the direct means of raising it to its present high level of excellence. In 1864 the export of eggs was

800,000. To-day it exceeds 430,000,000. The total number of hens in Denmark is 12,000,000, representing a value of more than £1,500,000.

Any account of the co-operative undertakings of the Danish farmers must include the General Supply Associations, which differ very much from the institutions known by this name in England. They have been founded by the farmers themselves, and number about 1,400, with a total membership of over 200,000. They exist mostly in the country districts, away from the large towns. The prices charged are generally the same as those of the private tradesman, but at the end of every year the surplus is divided in cash among the members of the association. The total sales made by these societies are upwards of £4,000,000 yearly.

A third of the stores sell to outsiders as well as to members, and are then obliged to obtain a business licence. Those associations which only deal with their members are exempt from this licence. It is found that one-sixth of the stores deal for cash only ; one-sixth give credit ; while the remainder allow their managers to grant credit at their own risk. Almost all the associations are themselves members of a Co-operative Wholesale Society, which has an annual sale of about £2,500,000, and manages factories for tobacco, chocolate, soap, and other important articles of general consumption.

A few years ago the farmers formed associations

for buying feeding-stuffs, the most powerful of which is the Co-operative Feeding-stuff Society of Jutland. This society has a membership of 30,000 and an annual sale of £1,000,000. On the same principle the co-operative dairies have recently combined with a view to the purchase in England of their coal, dairying machines, and appliances. Finally, mention may be made of an English Co-operative Wholesale Society which has agents in Denmark for the purchase of butter, and is the owner of a slaughter-house for pigs.

It has often been wondered why, with the striking successes of the Danes before them, English farmers have so consistently fought shy of adopting co-operative methods. The reasons probably are that the English farmer finds little or no difficulty in securing a good market for his *whole* milk, and therefore has no special incentive to go in seriously for butter-making. Danish farmers, however, when criticising our methods, attribute this shyness to the character of the English land system. They declare that "*tenant* farmers will not co-operate because, co-operative accounts being open to inspection, they fear that their landlords might raise the rents if it were found that they were prospering. Only *owners* of land will co-operate."

But we imagine that Sir H. Rider Haggard has discovered the *real* reason why co-operative farming and dairying are so unpopular in England.

He writes: "It is common knowledge that at present co-operation does not flourish in Great Britain. Speaking generally, notwithstanding the blandishments of the Agricultural Organisation Society, which now receives a small subsidy from the State, and much individual effort and exhortation, the British tenant farmer consistently declines to co-operate.

"In support of this view I will quote a few sentences from the yearly Bulletin of the International Institute of Agriculture. In a monograph on Great Britain and Ireland, under the section headed 'The Sale of Produce' it says:—'We find that in Great Britain co-operation for the sale of produce is still in its infancy.' Again, in another place it says: 'The co-operative creamery at which butter is made is almost unknown in England.' Finally, under the section headed 'Agricultural Credit' it says: 'Agricultural credit has made but little progress in England and Wales, and no credit societies have as yet been formed in Scotland. The number of credit societies is increasing slowly in England, but the aggregate business is still very trifling.'

"When we consider the Danish figures for co-operative undertakings, those for Great Britain are by comparison practically negligible. Various reasons for this unhappy state of affairs are suggested in the Bulletin. Thus, with reference to the sale of produce in Great Britain, it says:

‘The markets are close at hand, and there is usually a considerable choice, not only of markets to which to send produce, but of methods of dispatching it. These facts make it very difficult to induce the farmers to take concerted action.’

“But the thing goes deeper, indeed to the bed-rock of the British nature. Most farmers in this country do not co-operate simply because they *will* not. Co-operation is against their traditions, their ideas, and, above all, their prejudices. In any given village three of them will send three carts to the station, each carrying one churn of milk, when one cart could carry all three, rather than arrange together that two-thirds of this daily expense and labour should be saved. Any observer may see the process in operation.

“So it is with everything, and so, I believe, it will remain, unless in the future some great change should come over our system of land ownership. This of course has happened, or is happening, in Ireland, with the result that there co-operation is beginning to flourish.”

One of the most convincing arguments in favour of co-operative science remains to be stated. In the eighties—before the days of co-operative undertakings—the produce of the farms of the peasants only commanded a price of from 60 to 70 per cent. of that obtained by the produce from the great and wealthy farms. To-day the peasant farmers carry off an overwhelming preponderance of prizes and

medals, while the co-operative butter, which for the most part comes from the middle and small farms, fetches a price equal to, and sometimes greater than, that of the first-class butter made on the big farms.

Within the last few months the co-operative movement in Denmark has broken new ground. A Co-operative Bank, promoted and largely managed by the great co-operative societies, has been founded. Its clients will be found principally among the agricultural classes. Last year a co-operative cement manufactory began operations, which have so far been unsuccessful ; this comparative failure may be accounted for by the fact that the factory's chief supporter has been the General Union of Danish Supply Associations, an undertaking which was bound by contract to obtain all its supplies of cement during a certain period from the older factories. It has now been mulcted in damages to the extent of nearly £200,000 for breaking the terms of this contract ; and this fact will naturally have its effect upon the corporation which largely depended upon its support.

PART IV
CULTURE



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Open-Air Gymnasium, Copenhagen.

CHAPTER XII

EDUCATION

emocratic System—The Act of 1814—The System as it is at Present—Teachers—The Control of Elementary Schools—Fines for Non-attendance—The Elementary Curriculum—The County General Fund—The Cost of Elementary Schools—Examinations—Secondary Education—The Danish Libraries—Requirements for State Officials—The University of Copenhagen.

THE Danish educational system is completely democratic. From the elementary schools (*Folkeskoler*), through the secondary schools (*Mellem-skoler*) and the gymnasias, to the University, there is an admirable grading, arranged so as to afford every intelligent student an opportunity of making a career for himself.

Attendance in the elementary schools has been compulsory from 1739. But it was the remarkable Education Act of 1814 which really sent Denmark to the front in this matter, a position which she has maintained for nearly a hundred years, and still maintains. Indeed, it may be truly said that the Danes as a race receive the best general education in Europe. One only has to travel in the country districts and to remark the intelligence of the peasantry to be convinced of this fact.

The Act of 1814 has of course been modified and extended, principally by further Acts passed in 1899 and 1908 respectively. These latter measures provide a body of regulations and mass of safeguards only interesting to the educationalist. It will be sufficient for the purposes of the present work to summarise the system as now exists.

Teachers in elementary schools receive excellent training extended over a period of three years, during which time special attempts are made to discover and develop any unique powers which the candidates may possess. Four-sevenths of the teachers in Denmark are men, and the remainder women. The general supervision of elementary schools is still largely in the hands of the Church, in the person of its bishops and deans who act in co-operation with school committees elected by the municipalities or parish councils. The chairman of such a committee is invariably a clergyman.

All elementary education is free, materials, books, and accessories used in the schools being provided. Attendance is compulsory from the beginning of the first term after which the child reaches the age of seven years, up to the close of the term during which it attains fourteen years. Non-attendance without an approved reason is fined at the rate of 1½*d.* per day for the first thirty days, 3½*d.* per day for the ensuing

irty days, 7*d.* per day for the third period of irty days, and 1*s.* 2*d.* per day afterwards. Statistics show that on an average the children in towns miss one day in the year without reasonable cause, children in the country two days per annum. The maximum number of pupils for an elementary school class is fixed at thirty-five.

The principal subjects taken are Danish history, language and literature (seven hours per week obligatory), religious instruction, arithmetic, handwriting, geography, singing and drawing. In addition, special subjects for boys are gymnastics and handicrafts, for girls gymnastics and domestic economy. Further optional subjects for boys are mathematics, physics and modern languages, and these subjects can be taken by girls if specially desired. It will be granted that the curriculum is somewhat wider than in English elementary schools.

In the towns, the schools must open for forty-one weeks in the year, with an average number of hours per week of twenty-one, exclusive of gymnastics, drawing, handicrafts and optional subjects. In the country, schools must also open for forty-one weeks, but the minimum number of hours is reduced to eighteen weekly, in view of the longer distances which many of the children are compelled to travel.

Each county (*amt*) possesses a general fund for the following purposes: (a) providing school

teachers of long service with bonuses, (b) payment of pensions, and (c) affording assistance to schools in particularly poor districts. The general cost of all elementary schools in Denmark is borne as to one-half by the State, and as to the other half by the municipality or parish. Salaries for men teachers commence at £83 per annum in the towns, and increase to £165 per annum ; for women teachers they begin at £77, and rise to £110. In the country the salaries work out at a somewhat less figure, but free houses and gardens are generally provided, and there are often extra emoluments for services rendered in connection with the local churches.

The town schools contain either six or seven classes, and are so arranged that a normal pupil will pass through one class in each year. The senior classes usually meet from 8 o'clock in the morning, the junior classes from one o'clock in the afternoon to 4 or 5 o'clock. The average number of pupils in a town school is 1,500.

Before proceeding from one class to a higher it is necessary to pass the annual examination on the year's work. This is conducted by the school authorities, is mostly oral, and is customarily attended by the parents and friends of the pupils.

Such are the main features of elementary education in Denmark. The system seems to have been intelligently conceived, and it is certainly intelligently applied. It has produced some notable



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The Royal Academy at Sörö (a Secondary School).

[Photo: Paul Heckscher, Copenhagen.]

ults, and the Danes have every reason to feel proud of it. "In England you find factories, Germany barracks, and in Denmark schools." That is a Danish saying, and it expresses admirably the enthusiasm for education which the Danes possess.

Examined by the same standards, the Danish system of secondary education also takes a high place among European systems, but it is really on the soundness, wideness and thoroughness of her elementary education that Denmark must in the end be judged. The secondary institutions of Denmark consist of the popular high-schools, the technical and polytechnical schools, the evening continuation centres, and the numerous affiliated reading and lecture unions. Speaking generally, we find that the elementary schools, being so much wider in their scope than in England and including much of what we should term secondary work, have somewhat encroached upon the sphere of the secondary institutions, with the result that the latter do not fill quite the same place that similar institutions do in England. The curriculum of Danish secondary schools embraces literature, languages, handicrafts, and commercial and scientific subjects.

Reference might here be made to the Danish libraries. Although these are for the most part small, they consist of well-chosen volumes, and are much used for study purposes. There are

700 provincial libraries, with an average number of 500 volumes each. Most of the schools possess a separate library. The libraries in the larger towns contain from 2,000 to 10,000 volumes. The three most important collections of books in the country are the Royal Library in Copenhagen, with 750,000 volumes ; the Copenhagen University Library, with 400,000 volumes ; and the State Library in Aarhus, with 250,000 volumes. From the State Library as well as from that of the High-school of Agriculture, technical works are sent on application to all parts of the country.

State officials at the post and railway offices in Denmark are required to pass the *preliminær* examination, usually before or at the age of sixteen years. An excellent all-round education is necessary to successfully negotiate this test.

Those students who desire to proceed to the University must enter a classical school, first taking the final examination of the secondary school (*Mellemskole*). Those who do this then remain at the classical school until the age of eighteen years, when they may sit for the *studenter* examination, which gives entrance to the University. This examination is taken in one of three ways : (a) history and classical languages, with either English or German as an additional subject ; (b) modern languages, with Latin as an additional subject ; (c) mathematics and physics, with one modern language.

The University of Copenhagen is one of the best in Europe. It was founded in 1478, under bull issued by Pope Sixtus IV. on June 19th, 75, and has numbered many distinguished scholars among its professors. There are now out one hundred professors and tutors on its staff. It has six faculties, and is managed by a consistory composed of professors chosen by election, and serving by right of seniority. All lectures are free to the public generally with the exception of a few referring to purely professional subjects. The head of the University is styled *Rector Magnificus*.

All undergraduates are required to take an examination in the principles of philosophy within a year of entrance. This demands little reading on the student, and is not taken seriously.

Degrees may be taken in theology, law, economics, medicine, natural science, physics, and literature. The faculty of theology is entered by comparatively few students, owing to the uncertain economic position of clergymen in Denmark. The salaries paid to vicars and curates of the State Church are small and quite inadequate. There are no annuities which depend usually upon some such extraneous event as the value of the corn harvest. Often an incumbent is under an obligation to pay a pension to the widow of his predecessor in the living. In these circumstances it is hardly to be wondered at that there is a grave shortage

in the number of men offering themselves for Holy Orders. Efforts are being made to meet this state of affairs by placing clergymen in somewhat sounder economic position. The degree in theology demands five and a half years' reading and carries with it the licence to preach.

Law is the favourite faculty. The degree is taken not only by those desiring to become solicitors and barristers, but often also by men who enter a commercial life. It is divided into two parts, the first including mainly theoretical subjects, *e.g.*, the history of law, Roman law and the fundamental principles of economics; the second part is practical, embracing commercial, general, criminal, and international law. The average time for the degree is five and a half years.

Economics is not a popular faculty, owing to the fact that it is found to be not so useful as law in obtaining positions after leaving the University. There is, however, a growing demand in Danish banks and insurance companies for men who have taken this degree, and the numbers entering the faculty have consequently shown a decided tendency to increase in the past five years. The time taken, as in theology and law, is five and a half years.

The degree in medicine cannot be obtained in less than six and a half years. The reading work occupies about five years, and this is followed by

from fourteen to sixteen months as a volunteer in hospital, generally the National Hospital in Copenhagen. Ladies are admitted to this faculty, to all others, with the sole exception of theology. Denmark has produced many remarkable physicians and surgeons, a result contributed to in a small measure by the high level of excellence maintained in the University faculty of medicine.

It is noteworthy also that Danish nurses are accepted in all the principal hospitals in Europe and America, which is in itself a tribute to the thoroughly practical training which they receive.

The other faculties are organised on much the same lines as those we have mentioned. With the exception of the men reading law, the undergraduates follow the lectures with a keenness which would both surprise and gratify the authorities of an English university. With regard to law, it is not necessary to be so assiduous in attendance at lectures, as there are so many excellent law-books in Danish, and such a plethora of really brilliant teachers. Indeed, it is often the case that a law student is never seen at the University until the day on which he takes his degree.

Scholarships are numerous but small. Colleges, according to the English conception of that word, are non-existent. There are, however, several hostels where scholarship men live free, the nearest of which is the Regensen, built two

hundred and eighty years ago, and affording accommodation for about one hundred students.

The examinations for degrees are mainly oral, and the fees on being admitted are quite nominal. After taking the degree a graduate is styled *Candidate* (Bachelor). To be admitted into the faculty as a *Doktor* it is necessary to prepare an original thesis, and apply to the University for permission to dispute. The public are admitted to the disputation. The thesis is first attacked by two experts nominated by the University, and must then be defended by its author.

CHAPTER XIII

THE POPULAR HIGH-SCHOOLS

Christian Flor—Statistics relating to the High-schools—
Their Object—Life in a High-school—The Curriculum
—Superstitions.

THE popular high-schools are institutions which were originally peculiar to Denmark, although in recent years they have also been successfully established in Norway, Sweden, and more especially in Finland. The first high-school was founded in 1844 at Rödning, in Sleswick, by Christian Flor. When Sleswick became a German province the school was removed to Askov, near the Danon-German frontier. Many other similar schools sprang into existence about this time. After the year of 1864 a period of stagnation set in, and no further development ensued until about twenty years ago. During this dormant period the conditions of the peasantry were enormously improved, and recent years have witnessed a notable revival in the importance of these institutions.

There are now eighty of them in Denmark, with 7,714 pupils, 3,610 of whom are men, and 3,104 women. Five thousand six hundred of the pupils are between the ages of eighteen and twenty-five. Fifty-four per cent. of them are the children of

farmers, 21 per cent. the children of small holders, 3 per cent. the children of labourers, and 10 per cent. the children of skilled hand-workers. One-third of the pupils are supported by the State, although it is a cardinal principle that the help which a pupil receives from the Treasury shall not be sufficient to cover all his expenses at the school. Some sacrifice on his part is expected, in order that he may prove his earnestness and genuine desire to profit by the instruction given in the institution. On the other hand, care is taken not to exclude a poor applicant merely on the ground of his poverty. The inclusive fees amount to about two guineas a month. The total cost to the State is £25,000 yearly.

The aim of these schools is not so much to teach exact knowledge as to develop minds too long accustomed to move in one narrow groove, to suggest subjects of thought, to open up wider vistas, to set free the trammelled imagination of a peasantry inevitably bound to the soil, as a camel is bound to the eternal pilgrimages of the desert. Lectures, singing, conversation, physical exercises, history, folk-lore, make up the characteristic features of these highly original foundations.

Below is given an account of life in a high-school by a young woman who spent more than a year in one of the largest of them. The translation is included in this book because it shows something of the motive power behind the schools, and gives

vivid idea of the manner in which their success has been achieved. No attempt has been made to alter the coloured style of the narrative, as it was felt that the document as it stands would be a more valuable testimony to the usefulness of the institution about which it treats.

"The best time in which to visit a popular high-school is on an ordinary week-day. Educationalists and friends genuinely interested in the ideas behind, and the work done in, these schools may always obtain accommodation in the home of the principal for a stay of several days.

"The curriculum of all the schools is roughly the same. The men students are instructed in land-surveying and book-keeping during such time as the women students are taking needlework. Otherwise the subjects are the same for both men and women.

"A summer day in the life of a high-school girl will begin at half-past seven in the morning, when the sonorous bell rings for a breakfast consisting of rolls and butter with fresh, steaming coffee. When they assemble in the large, central dining hall, the girls are still a little heavy with sleep, but as the meal proceeds the subdued conversation gradually gives place to a noisy chattering. After morning coffee a short prayer is read in the principal's drawing-room, the pupils standing silently in little groups. This is followed by a psalm, and then an adjournment is made to the large lecture-hall,

where the proceedings are opened with the singing of a national song.

“ Then the principal ascends the tribune, a raised dais somewhat in the style of a church pulpit. Perhaps he will speak of one of the national heroes, a statesman, scholar, king or poet ; or he may choose as the subject of his lecture some important period of Danish history. We will imagine that he is speaking of Blicher, the moorland poet. He relates the sad history of that lonely and tragic figure, pointing out the peculiar intensity and grip of his poems, and concluding with the story of the splendid struggle he made for the right of free speech in Denmark and his great share in the Danish people's fight for a liberal education. During the lecture a perfect silence has been maintained in the hall. The girls have lived for an hour out on the Jutland wastes with Blicher. The method of teaching is open to impeachment. It may be inaccurate, it is often imaginative, and it is certainly unscientific. But it fulfils its purpose.

“ After the lecture clothes are changed, and in a few minutes the girls assemble in the gymnasium for drill and exercises. We Danes are keen gymnasts, and nearly all Danish girls are able to pride themselves on the possession of fine figures. The exercises are designed to furnish already strong young bodies with grace and elasticity, to create harmony between body and soul. The girls sing

and shout much during this hour, and the overshadowing spirit is one of gaiety. We do not go through our work with the same grim seriousness which we have heard is for the most part to be found in an English gymnasium. A refreshing shower-bath is taken at the end of the hour.

“ Then follows a travel lecture. A knowledge of geography is obtained by descriptions and pictures. There are no text-books. The pupil is not required to learn anything by heart. The lecturer speaks simply about nature, and the life of the people in various lands. He climbs the mountains, crosses the seas in quest of peril and adventure, lands in strange ports, sunburnt lands, Southern islands, mighty gorges, great plains and forests. He speaks of the sonorous life of cities and the sombre, starlit silences of the waste places of the earth.

“ At the close of this hour a period of recreation is insisted upon, during which it is strictly prohibited to remain in the class-room. Some of the girls take a short walk ; others play tennis on the school courts.

“ Dinner is served at midday. The food is not luxurious, but it is wholesome and well prepared. The tables are adorned with freshly gathered flowers and small Danish flags. The principal and his wife each preside over a table, while the remainder of the staff are spread among the pupils.

“ A free hour follows dinner. This is utilised for the reading of newspapers, writing of letters,

changing of library books, and consultations with the principal.

“ At half-past one the girls commence needle-work. In fine weather this is done in the garden, or the fields near the school. One of the teachers usually reads aloud from a book as the girls are working. Instruction is given both in ordinary practical sewing and in art-sewing, embroidery, etc. Special care is taken to develop good taste and a sense of harmonies and colour. The needle-work ends with a song, perhaps of Blicher’s, and then *smörrebröd* is taken, that characteristic Scandinavian meal.

“ The historical lecture, generally given by the principal, is regarded as the most important feature of the day. The same method is followed as in the other subjects, namely, vivid descriptions, pictures, questions, conversation. Perhaps the principal speaks of the long struggle between Greeks and Persians, between culture and barbarism. He shows how culture was kept alive during the dark ages, and in the time of Alexander the Great spread from frontier to frontier of the then-known world, preparing the ground for the subsequent propagation of Christianity.

“ This lecture finished, a hymn is sung, and the work for the day is ended.

“ The girls now have tea, and discuss the manner of spending the evening. Customarily a walk is taken into the surrounding country, perhaps to a

luded lake which in the neighbourhood of our school was always a favourite point for such excursions. The girls walk in groups with friends and teachers, while the sun sets behind those darkening forests of gigantic beeches so characteristic of Danish scenery. The lake is reached, the day has gone, and the night wind begins to rustle through the trees. Presently the evening bell is heard as a faint summons from the distant village, and one of the teachers gives the sign, and the girls return to the school.

'It is half-past nine. There still remains an hour to be filled in. How shall it be spent? The principal's wife solves the problem. She has heard that it is the birthday of one of the girls, and the occasion must be celebrated, invites the whole school to a 'rhubarb supper.' The invitation is unanimously accepted, and in less time than it takes to write the great drawing-room is crowded with happy girls, some sitting on chairs, others on stools, many on cushions spread over the floor. Every place is occupied. The informality of the occasion is evidenced by the distinct preference shown for the floor. The rhubarb is produced, and the guests are loosened.

'Perhaps there is in the room a young lady from that part of the country where Blicher lived. Through her grandmother she has heard many stories of the great poet. On one occasion, tired and exhausted, with his gun upon his shoulder,

he had rested in her grandfather's cottage on the Jutland moors. The girl speaks of these things, describes his lonely tomb in the corner of the old churchyard, while the others take in every word much more readily than they would take in the wisest sayings of the profoundest philosopher in the world. The speaker knows but little of Blicher or of his poetry, but she has been interested by the morning's lecture, and now she communicates her interest to the others. The girls grow more animated. The strong Jutland dialect mingled with the singing, mellow tone of the maid from Fyen and the pleasant drawl of the Sealand girls.

"Presently the conversation wanders away from the moorland poet. Short stories are told, though anything in the nature of a ghost yarn meets with a rather ignominious reception in the shape of a chorus of healthy laughter. The Danes are not generally superstitious, yet when they first come to the schools most of them retain lingering remnants of the old folk myths. Once, however, in the genial, healthy atmosphere of the school, they are shown that most phenomena are capable of a natural explanation. They quickly learn that the spook seen nightly on the churchyard wall is none other than the parson's little white goat Hans, in quest of the burgomaster's little black goat, Johanna.

"Before retiring the principal and his wife

e hands with every pupil. At eleven o'clock only lights burning in the great building are in the principal's library or study, where he preparing for the work of another day. Everywhere else is a deep brooding silence."

CHAPTER XIV

MODERN LITERATURE

Romanticism and Realism—Political Interests—Nationalism and Patriotism—The Reaction—Georg Brandes—the Literary Engineer—His Disciples—The Quarrel between the Old School and the New—Brandes' Influence on Norwegian and Swedish Literature—Ibsen and Strindberg—Holger Drachmann—J. I. Jacobsen—Sophus Schandorph—Erik Skram—Edvard Brandes—A Widening Gulf—The "Ideal Realists"—Karl Gjellerup—Herman Bang—Henri Pontoppidan—Peter Nansen—The Poets—Viggo Stuckenberg—Johannes Jørgensen—Sophus Clausen—Sophus Michaelis—Johannes V. Jensen—The New Idealism—The Drama—Ernst von der Reck and Drachmann—Problem Plays—The Satirists—Gustav Esmann and Gustav Wied—Henri Nathansen—Julius Magnussen.

A STUDY of the most distinctive Danish literature of the nineteenth century reveals a gradual progression from an ideal romanticism to a strong and forceful realism. In the beginning of the century Adam Oehlenschlaeger's dramas introduced the romantic idealistic period. It was a period of imagery and fantasy. Poets, playwrights and novelists all trod softly in the tempo of the past, awakening the old echoes, culling from that vast treasury the glittering jewels of time.

lights were dim. It was a wonderful period, the moonshine, scarcely tangible, an era of lowed imaginings. And it slowly faded away, leaving its mark upon that younger school which had been nurtured amid its soft lights and haunting shadows. Literature now began to approach reality to study and depict the present, though still in an atmosphere of idealism. Political interests began to awaken; the young writers dreamed of an ideal Scandinavia. During the war of 1848—1850 nationalism, patriotism, liberalism, introduced a new note into Danish literature. Then followed a reaction consequent upon the failure of the war of 1864. There ensued a decade of stagnation; fresh impetus was required. Denmark waited for the new pen which was to usher her literature into its latest phase.

The man who more than all others created this new era was Georg Brandes. He was the great literary engineer. He dug the big canals through which the literary streams of other countries flowed over Denmark. He irrigated his country with the mighty Nile waters of France, Germany, Italy and England. He was intensely realistic, a powerful and cultured opponent of "rose-pink" idealism both in literature and art. His first lectures aroused a storm of opposition, followed by an embittered warfare in words, declaimed and written. Yet he won disciples—Holger Drachmann, Schandorph, and

others. The quarrel between the old and the new schools was waged in verse and prose. The most important contributions were Kaalund's poetic letters to Drachmann and Schandorph's *Idealism and Realism*. Brandes believes in nature as the foundation of all true art and literature. He is not irreligious so much as anti-ecclesiastic. To him religion stands for faith and the past; his philosophy is the philosophy of hope and the future. "The cradle is more sacred than the altar."

Georg Brandes was too great to belong alone to Denmark. His influence widened, and Norwegian and Swedish literature began to reflect his teaching. His numerous critical studies and his lectures on the *Main Currents in the Literature of the Nineteenth Century* brought him into touch with the literary culture of Europe, with the religious freedom of Hegel and Feuerbach, with the new critical methods of Saint-Beuve and Taine, and with the political and social theories of Spencer and Stuart Mill. He persuaded Ibsen to abandon the symbolic and to grip the real. A decade later he profoundly influenced Strindberg, and through him changed completely the character of Swedish literature.

The writings of Brandes are often said to be anti-national and anti-religious. Rather are they cosmopolitan and agnostic. He is a Dane, though he has lived as much in Berlin and Paris as in

Copenhagen. It is possible that the movement of which he was the forerunner and founder has been carried much further than he himself desired, for in later years he has not commended all the exaggerations or the literary excesses of his followers.

Worthiest perhaps of all the disciples of the new school was Holger Drachmann (1846—1908), a lyricist of great power. His novels, poems and dramas all reveal an intimate touch with nature. He is mercurial. His emotions pass swiftly as cloud shadows over the sea. His play *Once upon a Time* is one of the greatest attractions of the repertoire of the Royal Theatre, while his poems *Songs of the Sea* and *English Socialists* have a graceful charm and a full-throated sweetness of melody worthy of Keats or Morris.

In 1885 Drachmann abandoned his old master, Brandes, denounced the exotic tradition, and declared himself a Conservative and a patriot.

J. P. Jacobsen (1847—1885) was another of the new writers who had bathed in the rich streams with which Brandes flooded Denmark. He is a master student of the soul. His works proclaim him a metaphysician, with a scientific power of observation and analysis. Like Goethe and Wordsworth, he is the poet-scientist, placing his trust in the mind and the senses. His style is wonderfully coloured, but it is not fantastic. Here is a man who can see relative values, who knows

how to correlate and group, to adjust and analyse. He explains a psychological development as a chemist explains a complicated reaction. He materialises occult movements, visualises emotional changes, plots the graph of thought streams.

Maria Grubbe, the first of Jacobsen's two long novels, is characteristic of his wonderful insight into the workings of human nature. Its heroine is the daughter of a nobleman. Through several marriages he depicts her deterioration, her slow abasement. It is a ruthless, pitiless picture of the destruction of a soul. There are no concessions to weakness at the end. It is a tragedy as *Macbeth* and *Werther* are tragedies, hopeless and unrelieved. Jacobsen's other novel, *Niels Lyhne*, written in his last illness, is a powerful study of a Free-thinker and is believed to contain a summary of his own religious views. Among his shorter stories *Fru Fönss*, *The Plague of Bergamo* and *Two Worlds* are the most characteristic, and may be justly compared to the best in Maupassant for their intensity and weird grip. Jacobsen was undoubtedly the greatest prose artist whom Denmark had produced.

Sophus Schandorph (1836—1901), who wrote *Idealism and Realism*, was the scribe of the lower middle classes. His wit is blunt and biting and not over-particular, his outlook on life that of a man who has probed to the soul of things and found there vanity, yet who accepts the position with a certain rough and blustering good

humour. Schandorph's style is strong and masculine, often lacking in both grace and restraint, and not always free from the grosser faults of bad taste and exaggeration. But—and this is a virtue of a kind—he remained true to the Brandes tradition. In 1876 he published a volume of realistic stories, *Country Life*, and in 1878 a novel, *Without a Name*. His most notable work, however, is a dourly amusing story of lower middle class life in Copenhagen, entitled *Little Folk*, published in 1880.

Erik Skram, born in 1847, the fourth of the great disciples of Brandes, has written little. But the intimate study of the mind of a young girl to be found in his *Gertrude Colbjørnsen* is generally considered to be one of the finest things in modern Danish literature. The most characteristic features of Skram's writing are his minute and detailed observations and his ability to crowd his stage, yet assign to each figure a *rôle* necessary to the development of the central idea.

If Georg Brandes opened this new and rich epoch, his brother Edvard closed its first period. The younger Brandes is a playwright, a student of Asiatic languages, a politician and a Radical Semite. His writings faithfully reflect the influence of his brother's philosophy, with, perhaps, certain added social sympathies and a greater sense of the value of practical work. But he has apparently deserted literature for a political sphere. For many

years he was a member of the Folketing, and he is now Minister for Finance in the Radical Cabinet.

A little younger than the writers of this first realistic school, we find a group of four able men who were still largely under the influence of Brandes, though differing from him on essential features. They were Karl Gjellerup, Herman Bang, Henrik Pontoppidan and Peter Nansen.

The first of this quartette, Gjellerup, born in 1857, began his literary work as an idealist. A student and admirer of Schiller, his faith lay in ideal conceptions. Like the great German poet, his earliest writings were vigorous assaults on social conditions, delivered not from a practical or utilitarian standpoint, but from the lofty elevation of the dreamer and visionary. Carried away in the flood of the Brandes movement, he deserted Schiller and became a realist of a very pronounced kind. During this period he lost faith in the efficacy of Christianity as a power for social regeneration and penned some cynical criticisms which he later learned to regret. Leaving Denmark, he travelled for many years, eventually returning to his old love, Schiller, and opposing the Brandes influence in literature as strongly as he had formerly upheld it. His poetic novels *Minna* and *The Mill*, written with a warmth and feeling not unworthy of the author of *Die Rauber* and *Wilhelm Tell*, constitute the best work of this

writer, who was at one and the same time poet, novelist, moralist and biologist. In the main Gjellerup comes nearer in sympathy to the great German and English poets of the first half of the century—to Goethe, Schiller and Lessing, Wordsworth and Coleridge—than to any authors of his own country or period.

Contemporary with Gjellerup, another romantic idealist tinged with realism produced a series of writings extraordinary in their intensity, strange and incomprehensible in their nervous movement. Herman Bang, born 1858, is an impressionist, a sketch artist among authors. His writings are a collection of shifting panoramas, restless and uncertain. At times pure photographic naturalism predominates, yet when the mood takes him, he can be as misty and shadowful as the Brocken in the evening. Erotic and pagan, classic and formless, satirical and creative, no writer of his time rivals him in versatility. His most important works are *On the Road*, a short novel of domestic life ; *Tine*, a passionate story of the war of 1864 ; *Ludvigsbakke* ; and *Mikael*, the last being a masterful study of character and temperament.

The work of Henrik Pontoppidan, born 1857, is the most naturally fresh and vivid in the whole range of modern Danish literature. In general style and outlook he is often said to closely resemble the great Russian Turgenev. There are no exotic perfumes, no heavy essences,

no scenes of darkened boudoirs or languorous delights. Land, forest, sea and shore provide the settings, and sunshine, storm, struggle and rest, the *motifs*, of his melodies. The smell of fresh earth, the dew on the grass in the early morning, the mist rising above the plains, the strong wind driving across the sea, this is Pontoppidan. No Danish writer so thoroughly understood, or possessed the ability to so faithfully reproduce, the lives and thoughts, work and faith, of his fellow-men, or could catch so inimitably the subtle, illusive atmosphere of the peasant homesteads of Denmark. Farmers and fishermen, shepherds and foresters, schoolmasters and parish priests, find a faithful reflection in the pages of Henrik Pontoppidan. *The Promised Land* is a collection of the three short stories which are considered to represent his best work, but without doubt the greatest contribution which he made to the literature of his time is the epic romance *Lykke Per*, begun in 1898 and finished in 1904. This is an immense work in eight volumes, depicting the making of a strong man. The minor characters embrace all the types of the decade which ended with the outbreak of the South African war in 1899.

Peter Nansen, the last of this brilliant quartette, is the writer who most resembles J. P. Jacobsen in outlook and style. The same deeply reflective spirit permeates the novels and poems of both men,

and both write in a particularly beautiful Danish. Nansen's work is very popular in Germany. His most important novels are *Julie's Diary*, *Marie*, *God's Peace*, and *Judith's Marriage*. The last is in dialogue form. There are only two characters, but each is intimately and finely drawn. It would be difficult to name a book in the literature of any country revealing greater skill in the analysis of mind and emotion. The majority of Peter Nansen's books are of a pronouncedly sexual type.

Towards the end of the eighties of the last century four young writers sprang almost simultaneously into prominence. They were Viggo Stuckenberg, Johannes Jørgensen, Sophus Claussen, and Sophus Michaelis. The first of these, Stuckenberg, has only written a few small volumes of verse. But they are characteristically Scandinavian. There is that mysterious something about them which marks them as the product of a mind descended from those fierce pessimistic old heroes who made the Viking saga epics, a strange reticence, a compound of gloom and stolid acquiescence, a mixing of the spirit of the Berserker with the noble fatalism of a General Gordon. The poems of Viggo Stuckenberg carry with them this touch of infinite and overbrooding sadness. He is a pale figure of the shades. He does not come out into the full sunshine and revel in it, as do the Latin poets. He seeks rather to solve the mystery of

abounding shadows. He is a lover of gentleness, refinement and beauty, but he shrinks from elemental strength and passion. He feels and senses deeply, and his nature is of that stamp which does not make exhibition of its pain and doubt. It shrinks within itself with the timidity of the wounded animal creeping away into some lonely shrine to die. Stuckenberg breathed his last at a very early age, and his final work, *Snow*, contains some of the most exquisite devotional poems in the Danish tongue.

The work of Johannes Jørgensen may be conveniently divided into two periods: first, anti-religious; and second, Catholic. In poetic style and treatment the first period has much in common with the earlier poems of his friend Stuckenberg. To this group belong some novels more clever than inspiring. But in the collection of poems *Confessions—Per Mortem ad Vitam*, he strikes a new note. He announces his conversion to Catholicism, to a belief in eternity, and in Christ as the hope of eternal peace. The closing poem of the book, *Confiteor*, is a noble recantation of the great error of his past. Following the publication of *Confessions* came that remarkable little essay *Lies and Truth*, in which he dissects the moral and spiritual life of Denmark, pillorying the gross deceits of materialism and scepticism, and claiming that the Christian Church is the one grounded and sure rock amid the restless and

surging billows of the age. All Jørgensen's later books are filled with this deep Catholicism, and transcend in literary form and purity of expression anything that he had written in his anti-religious period. The most notable of his larger works are *The Book of Travels*, *Our Lady of Denmark*, and *Pilgrimage*. His poems and hymns are exquisite things, ineffable as that light which plays over the faces of the angels in the pictures of Fra Angelico, sonorous as Gregorian masses, often wildly beautiful, as in the description of the death of Paul Verlaine.

Sophus Claussen is of another breed. His *métier* is homely life in small provincial towns. His characters are drawn from that same *milieu* used so vigorously in the novels of Schandorph. But he is not so sardonic, and his treatment is quieter, more restrained. He is never tasteless or vulgar. It is difficult to appraise the work of Claussen with any due perspective. He is too near, a remark which applies equally to his contemporary Sophus Michaelis. Doubtless much of what they have written will prove to be of ephemeral interest. The best novel of the latter is *The Apple Island*, an unequal blend of romanticism, symbolism and realism. It is more glowing and violent than anything else in recent Danish literature. Its colours and strong lights and vivid contrasts tend to blind and confuse by their sheer brilliancy. Yet it is undoubtedly a powerful

work, and its author will travel further along the road of literary achievement.

The most popular of the younger Danish authors is Johannes V. Jensen. He resembles Jack London in his choice of subjects as well as in his general method of treatment. The book of his which at the present moment is most widely read is *Braen*, an imaginative story of man in the earliest dawn of history.

Other writers whose names connect the age of romanticism with a later period are the two Ewalds—Herman and Carl. The former (1821—1908) was notable chiefly for a long series of historical novels in the style of Harrison Ainsworth. Carl Ewald, who died in the same year as his father, used the fairy tale as a vehicle for satire and the ventilation of his political and moral theories.

The writing of verse, which had declined in the early years of the Brandes influence, revived under Drachmann. But all attempts to introduce the theories of the symbolist to Denmark failed, and Danish poetry is, on the whole, natural and lyrical in its essential characteristics. Otto Fönss, the composer of seven small volumes of nature poems; Valdemar Rördam, author of that celebrated lyrical success *The Danish Tongue*; and, perhaps more than anybody else, the before-mentioned Johannes Jørgensen and Sophus Michaelis are the most popular of the modern Danish poets.

The development of stark naturalism in Danish literature has received a notable check in recent years. The plea of the idealists was for beauty, that of the realists for truth. But the truth of the realists was found to be mostly ugly. They sought for it only in the seamy and shadowy aspects of life. And hence the healthy reaction which, revolting against this one-sidedness, has resulted in a newer and saner conception of the functions of literature. The new writers chronicle with all the fidelity of the old, but their realism is not that species of crabbed narrowness which fails to find the sun because it is hidden behind a bank of storm clouds. It is a sort of idealism which has its roots in the living world of men and women; and it is as distinct from the old fantastic idealism as it is from the old ugly realism.

The characteristic drama of Denmark has participated in this same cycle of change and growth. In the later sixties of the last century the historical dramas constituted the chief fare in the menu of the national theatre. They were rich in scenic setting, and they were splendidly oratorical; but there was no psychology, no study of soul or emotion. They were historical pageants merely, panoramas reconstructed in the dust of libraries. And young Denmark, after the war of 1864, did not want to read her own history. Rather did she desire to look forward into the future, forgetting the past

in the spirit of "What outwardly has been lost shall inwardly be regained."

This was the moment when Ernst von der Recke and Holger Drachmann founded the school of lyrical drama in Denmark. The former's play *Bertran de Born* was produced at the Royal Theatre in 1873, and marked the definite breach with the old traditions, while Drachmann's comedies, *The Prince and the Half of his Kingdom*, *East of the Sun and West of the Moon*, *Once upon a Time*, and *The Dance of Koldinghus*, carried on the new movement.

Ibsen's work in Norway of course had its inevitable reaction upon Danish drama. The problem play began to appear, also plays dealing with marriage, the codes of life and conduct. The most successful were the works of Edvard Brandes, of Otto Bentzon, and of Karl Gjellerup. The latter's plays, when compared with his prose writings, are somewhat ponderous and heavy. His seriousness and his speculative methods are Teutonic rather than Danish. Brandes and Bentzon wrote with more facile pens. They possessed also a saving gift of humour, and the comedy spirit in their writings is not crushed by the stolid phlegm of the German. The most dramatic works of this trio are however Gjellerup's *Wuthorn* and *Herman Wandel*, both of which insist upon the rights of personality as against the rights of the community.

At the end of the century two new voices began to be heard. They were those of Gustav Esmann and Gustav Wied, both satirists. Esmann is a typical Copenhagener, witty, clever, not above vulgarity. The plots of his plays are most ingeniously elaborated, while his characters are drawn with a simple and admirable directness. His most popular plays are *The Dear Family*, *Magdalene*, *The Old Home*, and *Alexander the Great*. The latter is an inimitable comedy whose hero is not the Alexander of history, but an exceedingly humorous Copenhagen waiter.

Gustav Wied's plays deal, in a manner which is generally sardonic and often absurdly grotesque, with social and ethical problems. His figures are mainly caricatures, yet he has achieved immense popularity both in his own country and in Germany. *Her Old Grace*, *The Pride of the Town*, $2 \times 2 = 5$, and *Dancing Mice* represent his most characteristic work.

This slight survey of modern Danish literature must close with a brief mention of the work of three comparatively new men. Henri Nathansen has written several brilliant plays describing Jewish family life, the most important of which are *Mother is Right*, *Daniel Hertz*, and *Within the Walls*. Sophus Michaelis' Napoleonic play *St. Helena* and novel *1812* give promise of a great future, while his drama *A Marriage under the Revolution* achieved a phenomenal success in the

United States. Finally, Julius Magnussen is the author of two popular comedies, *Who loves his Father* and *His Single Wife*, both of which have at once found a place in the repertoire of the Royal Theatre.



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Thorwaldsen's Museum.

[Photo : Paul Hecksher.]

CHAPTER XV

THORWALDSEN AND MODERN ART

Bertel Thorwaldsen—His Parentage, Life and Influence—His Works and Style—The Classic Revival—Thorwaldsen's Museum—The Art of H. V. Bissen—Jerichau and the Germ of Realism—Stephen Sinding—Oppermann and the Transition—The Rodin Method—French and Danish Realism contrasted—The Academy of Fine Arts—Abildgaard and Jens Juel—Comparison between Dutch and Danish Paintings—Danish Sentiment—C. V. Eckersberg, the Founder of the Modern Danish School—Karl Madsen, the Ruskin of Denmark—Eckersberg's Pupils: Köbke, J. T. Lundbye, G. Rump, and V. Kyhn—Specialists in Peasant Life: Sonne, Dalsgaard, Vermehren, and Exner—Constantin Hansen and the Italian Influence—Vilhelm Marstrand—The Cosmopolitan Trend—P. S. Krøyer—Julius Paulsen—Vilhelm Hammershøj—Lauritz Tuxen—The Manet and Bache Temperament—Viggo Johansen—Historical Painting—Anecdotic *Genre*—Copenhagen Painters—Michael Ancher and C. Locher—The New Idealism and Joachim Skovgaard—The Symbolists—Zahrtmann—Ejnar Nielsen—Decorative Art—Hans Tegner, the Illustrator.

BERTEL THORWALDSEN, the greatest sculptor of the classical revival, was born in 1770 in Copenhagen. He was the only son of poor Icelandic parents, who had some years earlier emigrated to Denmark. His father was reputed to be a skilful wood-carver. Young Thorwaldsen never went to


school, the sole information which he received during his early years being obtained from his father, who taught him a little reading and writing and, most important of all, as it afterwards transpired, the elements of drawing.

During his whole life his knowledge of subjects other than his beloved art is said to have been exceedingly limited. At the age of eleven Bertel was sent to the Royal Academy of Arts in Copenhagen, having already exhibited promise of his remarkable future. For several years he pursued his studies under depressing circumstances, in his spare moments being required to assist his father with the wood-carving business. The old Thorwaldsen, perceiving in his son a means of slackening his own efforts, began to imbibe wine and spirits in quantities neither good for his health nor for his son's pocket. In two or three years he degenerated into a permanent inebriate, and the burden of supporting the family fell upon the shoulders of the young art student. Notwithstanding the adversities and misfortunes which persistently dogged his footsteps, however, Bertel found time to compete for all the Academy prizes, and carried them off one after another, until he had gained everything that was to be had, including the great gold Medal and a three years' travel scholarship in Italy. In the year 1796 therefore we find Thorwaldsen journeying southwards, having been granted a passage on a Danish warship.

He travelled to Palermo in Sicily, then to Naples, where he lived for a short time, and on March 8th, 1797, he entered Rome, the city in which he was to spend most of the remainder of his life, and to create those masterpieces which compelled the admiration and wonder of artistic Europe.

During the earlier years spent in Italy he lived with the Danish archæologist and art connoisseur Zoëga, and was busy absorbing the manifold beauties of that treasure-house into which fortune had placed him. He was lost in wonder and quite unable himself to produce anything. We can imagine him there, very childish and not free from vanity, a tall young man with rich, fair hair and contemplative blue eyes, a leonine head, well-shaped, classic features, and pale complexion. Such was the adolescent artist of the Roman days of wonder and amazement.

He worked only sufficient to satisfy the demands of the Academicians at home and to gain a renewal of his scholarship for a further three years. In 1802 he had exhausted his money, and almost run the course of his scholarship. Nothing had been produced of any special merit. At this crisis he conceived the notion of executing a statue of Jason returning to his galley after fetching the golden fleece from Colchis. To this work he devoted himself with feverish and continuous energy, completing it just before the time when he



must return to Copenhagen. The statue immediately created a furore. All art-loving Rome came to see it. Canova pronounced it "something extraordinary, a revolutionary piece of art." Notwithstanding the chorus of praise, Thorwaldsen could discover no purchaser, and being entirely without the means to execute the statue in marble, he reluctantly decided to abandon it, and even arranged with a German friend to accompany him on the return journey. On the day fixed for the departure he was taking leave of his landlady when the German came to announce that his papers were not in order, and that the journey must be postponed for a day. That day saved Thorwaldsen. For once officialism and red tape rendered a signal service to humanity in that they were the unconscious means of giving to the world a great artist. That very afternoon a wealthy English banker, Sir Thomas Hope, going the round of Roman sights under the guidance of an art connoisseur, came by chance to young Thorwaldsen's studio, bought the Jason statue at sight, and ordered its execution in marble.

From that moment Thorwaldsen obtained so many commissions that Sir Thomas Hope's order was not finally completed until twenty-five years later, when, as a compensation for the delay, the artist at the same time presented Sir Thomas with finely wrought statues of his wife and his two

daughters, and two of his other miscellaneous works in marble.

Orders poured in from all quarters, and it soon became evident that the years during which he had created nothing had not been wasted. Rather had they been years of preparation. After the Jason statue Thorwaldsen's works cannot be conveniently divided into periods, as can the creations of most artists. From the beginning everything he did was of a technical perfection which does not permit of ordinary criticism. His works vary only in the nature of their inspiration, the amount of personal interest he had in them and the share he himself took in their execution. For so great became the demand upon him that he was compelled at length to employ many assistants, only designing and directing the works himself.

From 1803 to 1819 his most famous productions were statues of Bacchus, Apollo, Ganymede and Adonis, the reliefs "Morning" and "Night" and "Alexander's Triumph," the latter of which is thirty-five yards long. It was executed for the Quirinal to commemorate the visit of Napoleon to Rome in 1812. It represents the entrance of Alexander the Great into Babylon after his great victory over the Persian king Darius, as described by the Roman historian Quintus Curtius Rufus. Three marble copies of this magnificent work have been made, two of which are in Copenhagen, and the third in the villa of Count Sommariva on the

lake of Como. "The Dying Lion," otherwise a very impressive piece of work, erected in Lucerne *in memoriam* of the Swiss Guard of Louis XIV. who lost their lives in the chivalrous defence of the Tuileries in 1792, has serious faults, arising mainly from the fact that the sculptor had never seen a lion.

In 1819 we find Thorwaldsen back in Denmark for a year, and being fêted royally. His homeward journey had been an uninterrupted triumph. In 1805 he had been elected a member of the Royal Academy of Arts, and during his visit honours and orders were showered upon him from kings and cities, learned societies and academies.

He returned to Italy and continued to live there until 1838, when he came back to Denmark for the last time, living in Copenhagen from 1838 to 1844. He died suddenly in the Royal Theatre on March 21st in the latter year.

The most important of his later works are the statues of the two Polish patriots Prince Poniatovsky and Count Potocky. The first of these was erected in Warsaw, but was taken by the Russians and destroyed. The statue of Gregorio VII. to be found in the church of St. Peter's in Rome is considered to contain some of the artist's finest work, but it is not well placed, being lost in the immensity of its surroundings. A rather indifferent statue of Byron was offered first to Westminster Abbey and later to St. Paul's, but

on religious grounds was not accepted. It now stands in the library of Trinity College, Cambridge. The largest work of this kind undertaken by Thorwaldsen may be seen in Munich in the great statue of the Duke Maximilian of Saxony. Shortly before his death he had been working on a conception of Martin Luther. This remained unfinished, and may be seen in Thorwaldsen's Museum in Copenhagen. But the greatest creations of the master to be found in Denmark are without doubt the statues of Christ and the Twelve Apostles, whose fitting resting place is the Frue Kirke.

Thorwaldsen's style was not modern. He was the greatest imitator of the antique which the nineteenth century produced. Severely classical in his early days, he relaxed a little towards the end. But throughout his long and busy life Hellenic and Roman-Hellenic influences predominated. His work does not show that strong vitality, that strenuous realism, characteristic of Rodin's statuary, but it is purer in form, quieter and more contemplative.

The artistic motto of this period was "Go to nature." To this Thorwaldsen added "and learn from the antique *how* to look at it." It is wrong to assume that Thorwaldsen's work was merely an æsthetic imitation of antique forms; he was too much of a creative genius to be content with that. His ideal was the presentation of pure, absolute beauty with no disturbing elements, and he

selected for treatment only such subjects as harmonised with his peculiarly Northern temperament—comparatively passionless, philosophical, placid and good-natured. He depicted almost entirely goodness, content, happiness and purity; the dark side of life he avoided: pain, care, passion and suffering discovered no responsive chord in his artistic soul. One of his many critics however has admitted that “sometimes a kind of sly smile seems to pass through his soul into his art, especially when dealing with Cupid and the little love-god’s caprices.”

Thorwaldsen’s Museum, in which are collected copies of most of his works, is naturally the Mecca of Danish art. The building itself is two stories high. Its style is confined to one motive, and is an almost exact replica of an ancient Etruscan rock sepulchre. The quadrangle encloses a courtyard in the centre of which is the simple tomb of the great sculptor. In the back wing is the famous “Hall of Christ”—the Holy of holies of this wonderful temple of art. The other rooms open into each other, and each room contains but one statue, some bas-reliefs inserted into the walls, and a couple of busts. This arrangement was made at Thorwaldsen’s express request, as he wished the spectators “to concentrate their interest so far as possible on one work at a time.”

In the vestibule are models of the celebrated equestrian statue of Poniatowski, the portrait

statue of the unhappy Pope Pius VII., and statues of Schiller, Gutenberg and the Duke of Leuchtenberg. Perhaps the most interesting of all, however, is the model of the Swiss lion monument at Lucerne. In one of the side corridors is a notable reproduction of the John the Baptist group from the Frue Kirke. The rooms behind the tomb are mainly filled with statues of Greek gods and heroes of the Odinic and other pagan legends. The mighty form of Christ is placed in a special hall surrounded by the exquisitely wrought figures of the Twelve Apostles. In the upper rooms are copies of the Alexander frieze and the "Morning" and "Night" bas-reliefs, while one special antechamber is devoted to a collection of Thorwaldsen's books, his clay models, drawings, some of his furniture, and, most interesting of all, the last piece of work upon which he was engaged before his death, a bust of Luther. The strokes of his modelling-stick are visible, and the little lump of clay which he placed on the breast when he stopped his work, only a few hours before he died, is still there.

Thorwaldsen's influence on Scandinavian art is generally considered to have been in many respects a dangerous one in that for some considerable time Danish sculptors were attracted by it to Italy and the classic. As a classicist and pagan he failed to foster those national, personal and religious sources of inspiration which are after all the truest ideals of creative art. This bias towards the

antique can also be distinctly traced in the works of the great Swedish sculptors Sergell, Byström and Fogelberg, but perhaps it is most plainly marked in the art of H. V. Bissen (1798—1868). This sculptor was one of Thorwaldsen's most celebrated pupils and imitators, but his works, which are distinguished by an extraordinary purity and refinement of conception, reveal an inordinate admiration for the Greek method.

Another of Thorwaldsen's pupils was J. A. Jerichau (1816—1883), whose work however does not possess the same purity or strength as Bissen's. The master's influence is still potent, but Jerichau's style foreshadows that modern realism which was destined to culminate in Rodin and the French school. The best known of this sculptor's works is the *Man and Panther* statue in the Glyptothek at Copenhagen.

The gradual evolution of realism in sculpture may be perfectly observed by passing from the Bissen room in the Ny Carlsberg Glyptothek through the Jerichau room into the gallery filled with the works of Stephen Sinding. Oppermann, the great critic, sums up this transition process very admirably. "We come," he says, "to one of those stages which may be called dramatic because of the violence of the conflict between the old, which is passing away, and the new, which is taking its place. A new generation, eager to strike out new paths, begins to play the leading

part—a generation which is not rich by inheritance, nor as yet ennobled by struggle. A characteristic representation of the art of this generation is to be found in the works of Stephen Sinding. Whilst men of the old school in their works and ways showed that they built upon and found rest in a Christian view of life, no such firm spiritual basis is discernible in the productions of this section of the new school ; they are distinguished by unrest, aspiration, craving. The artists insist on what is real and tangible ; in place of the grandeur, peace and spiritual vision of their predecessors, they must have life, passion and motion.”

It is at this point that Scandinavian art leaves Thorwaldsen and the classic and begins to approach the Rodin method ; yet, curiously enough, it always remains more manly and free than the French. It never becomes either so soft or so sensuous, and the attitudes of its figures are more charming and graceful. In this latter respect the spirit of Thorwaldsen has not striven in vain.

Traces of the classic revival may also be found, although in a much less degree, in the paintings of the time when Canova and Thorwaldsen were at the height of their fame. It was not until the nineteenth century that Danish art acquired its marked national character. In 1754 the Academy of Fine Arts had been founded, but the early exhibitors, including the celebrated Abildgaard

and Jens Juel, were too imitative in their style. Juel, however, did some admirable work in portraiture, foreshadowing the trend which ultimately led to the establishment of a distinctive national style.

There is a certain relationship between the art of Denmark and that of her near neighbour Holland. In both countries nature presents few vivid contrasts either of form or colour, and the result is that Dutch and Danish painting is as "demure and staid as are Dutch and Danish landscapes." The artists display no bold originality, no magnificent depth of colouring, no splendid virility either in the choice or treatment of their subjects; rather do they reveal a tender intimacy with melancholy and homely things, a dreamful, placid imagination, and a delicate refinement of touch, all of which are related to the national temperament at its best. One Danish critic has phrased this characteristic very clearly. He writes: "Touching feeling for home and country is the key-note of modern Danish art. The Dane has no sentiment but that of home. His country, once powerful, has become small and unimportant in the councils of the nations. It is not difficult to understand therefore that he clings with a melancholy tenderness to the only thing that is left him—his home."

The real founder of the modern Danish school was C. V. Eckersberg (1783—1853), who was a

pupil of the French painter David. Eckersberg's works, particularly his portraits, combine careful design and delicate colouring with an elegant style, but most of his landscapes and marine studies are immature and laboured in execution. It is quite clear that David influenced the technical side of his art only. Karl Madsen, the renowned writer and the Ruskin of Denmark, has declared that it is Nature in her every-day dress which Eckersberg depicts. Yet whilst he saw only prose where others saw poetry, he managed to discover poetry where others could only see prose.

Eckersberg's most successful pupils were Christian Købke (1810—1848) and the better-known painters J. T. Lundbye, G. Rump, and V. Kyhn. The first of these, Købke, was noted mainly for his clever and spirited portraits in the modern style, and for his pictures of Copenhagen. J. T. Lundbye was a landscape and animal painter of merit, while both Rump and Kyhn largely confined themselves to every-day life in Denmark. The latter was probably at his best on large canvases.

Towards the middle of the century Sonne, Dalsgaard, Vermehren and Exner began to specialise in provincial peasant life. The works of all these men are full of impressive sentiment and feeling. Constantin Hansen, a painter of this period, was one of those who had fallen under the spell of the Thorwaldsen influence. He is remark-

able for a series of brilliant Italian pictures. After having lived in the South for many years, he returned to Copenhagen and executed the beautiful decorations in the lobby of the University.

The greatest and most versatile among modern Danish painters was without doubt Vilhelm Marstrand (1810—1873), famous alike for his great Bible subjects, his comic figures from Holberg, the Danish Molière, his pathetic scenes from the history of his own and other countries, and his animated and vigorous pictures depicting the stir and tumult of Italian street life. Marstrand and Karl Bloch were the leaders in a phase of grandiose historical painting and anecdotic *genre* such as was witnessed in almost every country about this time. Bloch as a historical painter is said to greatly resemble Piloty, the German; his vivid colouring was acquired in the Italian schools. His most famous pictures are *Samson in the Prison-house* and *King Christian II. in Prison*, both of which created a genuine outburst of admiration and praise.

French and cosmopolitan influences now began to overshadow and to break up the distinctive national characteristics of the immediate followers of Eckersberg. A group of younger painters, which included P. S. Krøyer, Julius Paulsen and Vilhelm Hammershøj, reflected into Danish art the principles and teaching of the celebrated cosmopolitan Otto Bache. Krøyer perhaps had the happiest

and lightest touch of this trio. He was straightforward in his methods, and he employed no trickery. His art, as well as that of his friend and contemporary Lauritz Tuxen, was allied to the temperament of Manet and Bastian Lepage. Their elegance was Parisian, Kröyer especially revealing a bold inventiveness and amazing skill. He was a painter of wonderful open-air effects and "tender twilight moods," the glare of sunshine, the soft reflections of artificial light. Karl Madsen has said that "in portraiture he stands alone among Scandinavian artists; in versatility and facile elegance he may almost be compared with Frans Hals."

Julius Paulsen is one of the most talented painters of the day. His colouring possesses a softness and delicacy worthy of Rembrandt. Vilhelm Hammershøj is remarkable for his exquisite sense of tone and refinement of effect. He paints magical contrasts of light in half-darkened rooms. It is said that he is a great admirer of Whistler, to whose genius his own is akin. Perhaps of all Danish painters he reveals the most pronounced individuality.

Another artist who found his inspiration in the French school is Viggo Johansen, who has, however, superimposed upon the Manet and Bache temperament a certain gentle dreaminess which is entirely his own. He specialises in dark sitting-rooms, children's parties, quiet festivities; *An*

Evening at Home, The Christmas Tree, Grandma's Birthday, are typical subjects. Johansen is also one of the finest landscape painters Denmark has produced. Over all his pictures of this type a mysterious and melancholy stillness seems to rest. So popular are they, and so quickly and eagerly purchased, that several years ago the Luxembourg attempted in vain to secure one.

Belonging to this cosmopolitan group also is Axel Helsted, a *genre* painter of skill and merit but no great genius, while Holsøe, Ring, Haslund, Syberg and Irminger, all of them contemporaries, paint typical scenes from Copenhagen life. Michael Ancher and C. Locher specialise in marine subjects, Skaw fishermen and the like ; their work is characterised by a certain broad sympathy and careful observation. Viggo Pedersen, Johan Rohde and Philipsen live together in the neighbourhood of Copenhagen ; their paintings are marked by the same sober melancholy and gentle tone.

The new idealism is represented by Joachim Skovgaard, who has been gallantly endeavouring for a number of years to endow Denmark with a monumental type of art. Of late he has become more and more notable as an interpreter of Bible subjects, his finest canvases in this direction being *Christ among the Dead* and *The Pool of Bethesda*, both of which caused a sensation in the world of art. His most famous work is his fresco-decorations on the ceiling of the Cathedral at Viborg.

Of the younger painters Harald Slott-Møller and J. F. Willumsen are remarkable for their daring and their highly symbolical style. Zahrtmann, a lover of Italy, occasionally rivals Etty in his subtlety of tone, though many of his Italian pictures are sheer debauches and riots of colour. His historical pictures of Christian IV.'s unfortunate daughter, Eleonora Christine, are considered the very best in modern Danish art. Ejnar Nielsen's portraits reveal the overshadowing spirit of Danish pessimism and melancholy.

Among decorative artists of genius Denmark can only count one, L. Frölich ; among illustrators, Hans Tegner is probably the greatest of the day.

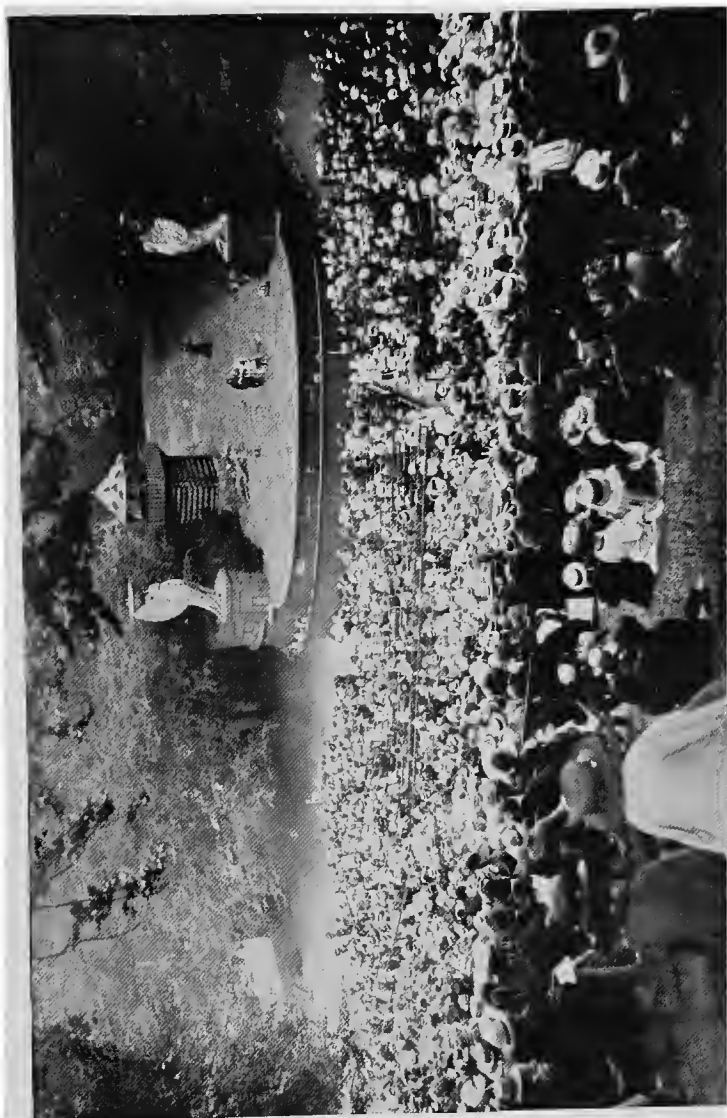
CHAPTER XVI

MUSIC AND THE THEATRE

Comparison of Danish and Irish Music—Weyse and Hartmann—Heise—P. E. Lange-Müller—Saga Music—Gade's Symphonies—Henriques, Enna, and Carl Nielsen—The Critical Faculties of the Danes—Danish Ecclesiastical Music—The Copenhagen Conservatoire—Prof. Neruda—The Early History of the Theatre in Denmark—Holberg's Comedies—The Romantic Plays—German Drama—The Introduction of Vaudeville—J. L. Heiberg—Problem Plays—Ryge and the First Nielsen—Michael Wiehe, Fru * Johanne Luise Heiberg, Emil Poulsen and Fru Hennings—The Royal Theatre—Representations of Foreign Authors in Denmark—Shakespeare's *Hamlet*—The Great Actors of the Last Decade and the Modern Period—The Dagmar Theatre—Schools of Acting—The Folke and New Theatres—Other Theatres—Varieties.

A CERTAIN similarity is easily traceable between the music of Denmark and that of Ireland. Simplicity, sincerity, a certain subdued and wistful melancholy, and rare flashes of fire and passion—these are the characteristics of the native compositions of both countries. Denmark has never produced what may be termed great classical music; hers is essentially a peasant music. National Danish songs are like Danish landscapes and Danish art, quiet and pastoral, plaintive and

* Fru = Danish for Madam.



unassuming, redolent of still autumn evenings spent in the glades of fragrant beech woods, or on undulating and heather-covered moors, or on the bosoms of secluded and placid lakes. The most characteristic are the songs of Weyse and Hartmann, though perhaps those of Heise are better known, especially his music to Ibsen's *Kongsemnerne*, von der Recke's *Bertran de Born*, the opera *King and Marshal*, and the Jutland national song *Jylland mellem tvende Have*.

A small group of composers later attempted—not with great success—to approach the classical in conception and style; and mention must be made of a brief period of inspired music whose massive strength and wild beauty can only be compared to the grandeur of the ancient Scandinavian sagas. But, speaking generally, the musical genius of the Danish people expresses itself most naturally and effectively in songs and ballads, folk-dances and sonorous hymns. The only really brilliant exception to this generalisation is Gade, the composer of several beautiful symphonies and orchestral suites, and whose best-known works, the *Elverskud* and *Korsfarerne*, are regarded as among the great masterpieces of the latter half of the nineteenth century.

Another popular composer of this period, P. E. Lange-Müller, is renowned chiefly as a writer of spirited ballad music, though his finest work is undoubtedly contained in the music which he

wrote to Drachmann's romantic play *Once upon a Time*. Lange-Müller is the composer of the Danish national anthem *We love our Land*.

Among younger composers the names of Fini Henriques, August Enna, and Carl Nielsen deserve mention. Henriques is justly celebrated for his distinguished dance and ballet music, particularly *The Little Mermaid*. Carl Nielsen's opera *Saul* is the only big work of this kind produced in Denmark in recent years. August Enna has written some delicate and fanciful music round many of the fairy tales of Hans Andersen.

Although they cannot be regarded as exceptionally distinguished in composition, the Danes are certainly excellent judges of music. Their critical faculties are both sound and well developed, and as a nation they evince a genuine love of good music comparable only to that shown by the German and the Italian peoples. Grand opera, orchestral recitals, classical concerts and popular music are in great demand all the year round, while the sacred concerts held periodically in most churches are a special feature of Danish life. Danish ecclesiastical music is dignified, melodious, and in the main exceedingly beautiful, though it sometimes errs on the side of heaviness, probably owing to its Lutheran and Teutonic origin.

The Copenhagen Conservatoire of Music, which was founded in 1866, has done a great work in popularising the music of the old and modern

masters, in promoting concerts on an artistic level with those of the academies of the leading musical centres in Europe, and more particularly in the teaching of singing. Prof. Neruda, who was a brother of Lady Hallé (died 1915), and one of the best-known teachers of the day, had been for over a quarter of a century the inspiring spirit of all that may be accounted finest in modern Danish music. The Copenhagen Conservatoire is subsidised by the State, and has been from time to time richly endowed.

It is only in two or three of the best theatres of Copenhagen that the acting may be said to reach the artistic excellence of either Paris or London. The Royal Theatre, the oldest in Copenhagen, for nearly two hundred years held a privileged position, as it had been granted a monopoly of all the best plays, native and foreign, the other theatres only being permitted to produce light comedy or such plays as were not required by the Royal Theatre. This "monopoly" was subsequently relinquished, and a reserve put upon 160 plays only, subject to the condition of producing them within a period of ten years.

The first "playhouse" in Denmark was opened in 1722, in order to compete with the numerous foreign troupes of actors who then toured the country. It achieved an instantaneous success, and from that time the dramatic art, so brilliantly founded by Holberg, has never looked back. At

the end of the eighteenth century the romantic play became the rage, although the works of Molière, Sheridan, Goldsmith and Lessing still remained more or less popular. Unfortunately, however, French and German decadent influences were in the ascendant, and for the first twenty-five years of the nineteenth century dominated the Danish stage to such an extent that native plays stood no chance of presentation. The introduction of the vaudeville method by J. L. Heiberg in 1825 brought to a sudden end the era of florid German drama, and for more than forty years gay, light comedies monopolised the programmes of the principal Danish theatres, to be in their turn superseded by the problem plays of Ibsen and Björnson. The greatest actors produced by the old romantic school were Ryge and the first Nielsen, and of the newer school Michael Wiehe and Fru Johanne Luise Heiberg, Emil Poulsen and Fru Hennings. The two latter were particularly successful in Ibsen roles.

The present Royal Theatre was built in 1872—1874 on the site of the old State Theatre. It seats about 1,600 persons, and produces opera, plays, and spectacular ballet. Performances begin early and punctually, no person being allowed to enter during the acts. The theatre is subsidised by the State, the most prominent of the performers being styled the King's Play Actors. They are specially trained at the school attached to the



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[By kind permission of Charles H. Kelly.

Niels R. Finsen.

building, often serve for forty or fifty years, and receive a substantial pension on retirement. The repertoire of this famous theatre includes practically all the world's most celebrated comedies and tragedies, operas and dramas ; the greater number of ballets produced, however, are specially Danish. The most popular of the foreign authors whose works are regularly represented here is undoubtedly Shakespeare. Among modern playwrights Shaw, Pinero, and Arnold Bennett compete for the first place in public estimation. Shakespeare's *Hamlet* was first produced in Denmark in 1812. Like the Comédie Française in Paris, the Royal Theatre is associated with one of the greatest comedy writers of all time, Ludvig Holberg (1684—1754), the Danish Molière.

Among the greatest actors of the last decade whose names are connected with this theatre are Olaf Poulsen, the comedian to whose histrionic genius is mainly due the credit for the fact that Holberg's comedies are now better presented and more popular than they have ever been before ; Dr. Karl Mantzius, a versatile actor, who has only recently retired after a lifetime of distinguished service ; Jerndorff, an actor of the old school ; and the celebrated opera singers Peter Cornelius and Herold. The younger men, who are ably maintaining the fine traditions of the theatre, include Neiendamm, Johannes Poulsen, Poul Reumert, and Adam Poulsen.

The Dagmar Theatre is generally reckoned the second theatre in Copenhagen. Its productions invariably possess a fine literary flavour, and those who direct its policy make a special point of encouraging young writers. Shakespeare, Ibsen, Shaw, D'Annunzio and the principal dramatists and playwrights of all countries and periods are regularly presented at this theatre, whose most renowned actor was Fru Betty Nansen. She is not at present performing on her old stage.

The Folke Theatre is principally a family place, where the fare is invariably light and harmless. The New Theatre is devoted to costume and modern comedies. At the Casino, the Scala, and the Nørrebro may usually be found musical comedy, revue or operette. Carl Alstrup, the principal actor at the Scala, and Frederik Jensen, of the Nørrebro, are the two most popular comedians in Copenhagen.

There are several variety theatres, but none of high standing. The prices in all theatres are moderate, the acting in others than the four first mentioned is often poor, while the plays are mainly vulgar adaptations from the German or French. No Copenhagen music-hall bears a high reputation, and some of them, particularly those in the Frederiksberg quarter, might have been transplanted from San Pauli or Montmartre.

CHAPTER XVII

RECENT SCIENTIFIC RESEARCH IN DENMARK

An Array of Illustrious Names—Niels Ryberg Finsen : his Parentage and Early Life—The Latin School at Reykjavik—Life reverses the Judgment of School—At the University—Disease—Graduation—The Origin of Finsen's Speculations—The "Red-room" Cure for Small-pox—Foundation of the Institute of Light—The Significance of Finsen's Achievement—His Inventive Faculty—His Heroic End—The Institute To-day—Concentrated Treatment—Intense Light Baths—Internal Diseases—Dr. Valdemar Poulsen—Early Career—The Telegraphone—"Spark" and "Wave" Methods of Radio-telegraphy—Claims of the Poulsen-Pedersen System—Commercial Position—Wireless Telephony—Prof. P. O. Pedersen—Ivar Knudsen—Baumgarten and Burmeister—Rivalry with German Shipbuilders—Purchase of Diesel Patents—Success of the Diesel Motors—Comparison with other Motors—The Diesel Engine as applied to Ships—The First Motor Liner launched—Comparison of Motor-propelled and Steam-propelled Vessels.

DENMARK, although one of the smallest countries in Europe, has during the last half-century contributed an imposing array of illustrious names to the records of original work in science, philosophy, literature and art. The recital of but a few names is necessary to prove the truth of this statement. Thorwaldsen, many of whose statues may be regarded as among the most exquisite and beautiful

pieces of sculpture wrought in modern times ; Ørsted, the discoverer of electro-magnetism ; Hans Andersen, that great wizard of the North, who is known and loved wherever there are ugly ducklings and folk young enough in spirit to follow him in his fantastic and whimsical adventures ; Finsen, whose name deserves to rank with those of Lister and Pasteur, Metchnikoff and Röntgen ; Georg Brandes, perhaps the greatest living Dane and one of the most potent forces in European letters of the day ; Dr. Valdemar Poulsen, whose radio-telegraphic system, based on a continuous-wave theory, is proving itself the only serious rival to the Marconi system, and bids fair to become one of the big things of the future ; and, finally, Ivar Knudsen, the famous engineer, who built and sent to sea the first liner to be exclusively driven by oil-engine motors—all these are the names of Danes who in the last fifty or sixty years have achieved an international reputation in some branch of specialised scientific research, of literature, criticism, or art. It is a list of which any country might reasonably feel proud, and when we recollect that Greater London contains nearly three times as many people as the whole of Denmark, the record becomes still more amazing.

For the purposes of the present chapter we shall select three only of these names for a more detailed study, as representative of the most important scientific work recently accomplished in Denmark.

Niels Ryberg Finsen was born in 1860 at Thorshavn, in the Farøe islands, his parents being Icelanders. His father was the highest Government official on the islands, and the Finsen family can trace their ancestry back to the year 900 A.D. Many of them were bishops, and many more were lawyers. The arms of the family—a falcon on a blue ground—form the basis of the new national flag of Iceland.

As a boy young Finsen was quiet and self-contained, a passionate lover of nature and of such outdoor sports as his rather weak frame permitted. He is said to have been fonder of climbing the precipitous "fjelds" of his native islands than of the schoolroom. Upon the lofty summit of one of the hills on the island—no superlatively easy climb even for a man in the full measure of his strength—Finsen has carved his initials. The old house in which he first saw the light stands not far from the shore, and his boyhood was spent in bathing and fishing, climbing and shooting, participating in the local whale-hunts, fowling wild birds, sheep-shearing, racing after the wild ponies on the uplands—a free, natural, open-air life, which doubtless contributed much to the development of that impatience of restraint and contempt of conventionality which marked his later years, and to that extraordinary dexterity of fingers which would have made him, had he so chosen, the most celebrated surgeon of his time. In the wind-

driven solitudes of the Faröes Niels Finsen learned courage, endurance, adaptability, steadiness of nerve, and skill of hands, all of which were preparing him for and leading him up to that great calling for which destiny had marked him out.

At an early age he was sent to the Latin school at Reykjavik, the capital of Iceland and the home of his forefathers, after a brief and unsuccessful sojourn at Herlufsholm's Public School in Denmark. The head of Herlufsholm's has placed on record the following discouraging judgment of his pupil: "Niels Finsen is a good boy at heart, but his abilities are small, and he shows utter lack of energy." It is a remarkable fact, however, that life often reverses the judgment of school, and this proved to be so in Finsen's case. His career at Reykjavik was perfectly successful, and it was in the society of the proud, self-reliant Icelanders that Finsen developed that almost supernatural strength of character that became so obvious in his later life. In 1882 he began his degree work at Copenhagen University, having been granted a scholarship from the Reykjavik school. At this time he shared the political opinions of the young Radicals of the eighties, and Dr. Thulstrup, his friend and biographer, has put it on record that his "Radicalism sprang from his ideal character. He was weighted neither with traditional opinions nor Conservative prejudices. From his earliest days he sought only truth, fearlessly examining the

basis of his every conviction, and never satisfied with a dogma or a theory merely because it is held by general consent. He was the last person to be won over by mere surface eloquence, which was as repugnant to his frank and open character as to his scientific instincts."

In these early days of university work his radiant cheerfulness became clouded by the knowledge that he was suffering from a mysterious and incurable disease, which had been slowly and insidiously creeping upon him during the latter half of his youth. He grew continually weaker, and his constitutional activity deserted him, never again to return. Like Robert Louis Stevenson, he knew he was doomed early, and like him, he lived to make a fine and heroic fight for life. By a magnificent effort—which in after-days, when it became known, stirred the imagination of his country and of the world—he battled against the terrible malady, resisting it step by step, until in the end he was compelled to live an almost entirely sedentary existence, husbanding every precious grain of his strength, scientifically calculating every ounce of effort which he could safely put forth.

In 1890 he graduated. His degree, however, was an undistinguished one owing to the ill-health from which he suffered during the period of his reading; but it is eloquent of the impression he had already produced among those best able to judge

that, notwithstanding his poor degree work, he was immediately offered a position in the University laboratory. Here he remained for five years as a prosector of anatomy, at the expiration of which period he resigned his appointment in order that he might be free to make a series of experiments which had previously occurred to him.

In his reminiscences he tells a very interesting story of the origin of his speculations on the medical qualities of light. He had observed that when he was in the room of his friend, which was light and sunny, he invariably felt better and worked better than when in his own room, which faced due north, and was therefore dark and sunless. From his own room he commanded a view of a back yard and a small tiled shed. One afternoon, while depressed and in ill-health, he was sitting at the window, staring idly out over the yard. The sun was shining, but one half of the shed was in shadow. Upon the sunny half a lazy black cat stretched and dreamed luxuriously. Presently the shadow reached forth and touched the slumbering feline. Immediately it rose, moved to sunny quarters again, licked itself, and contentedly renewed its interrupted dreams. This performance the cat repeated several times and on several days, always preferring the sunny half of the shed. Finsen concluded from this simple observation that light was beneficial to the cat, since it instinctively searched for it ; and he resolved from

that moment to give the matter scientific investigation. Humanity is as deeply indebted to that lazy black cat as it is to Newton's apple, or Watt's boiling kettle, or the foot-bath of Archimedes, for from these simple beginnings grew his profound researches into the effects of certain kinds of light upon the germs of disease.

Believing that the latent energies of the sun's rays could be split up into two groups, one harmful and the other beneficial, he commenced to experiment along lines which he felt inwardly convinced would lead him to an important, if not epoch-making, discovery. He had heard of the wonderful researches of the English doctor Black in the treatment of small-pox. This able physician excluded all light from his patients, keeping them in dark rooms ; and by this means he had been able to effect several complete cures. Finsen's theory was that it was only necessary to exclude the violet or chemically active rays of the spectrum. In a famous pamphlet, published on July 5th, 1893, he explained his method, which was to place the small-pox sufferer in a red-screened room, the red colour effectively absorbing the inimical blue-violet rays. He then established what was called his "red room," and from this beginning developed the great institute now designated by his name.

It is somewhat curious that Finsen began his work with an investigation of the harmful functions

of certain kinds of light. It was characteristic of the man. He believed in attack first, defence afterwards. Not content with the success he had attained, he immediately renewed his experiments in other directions. He noticed that the black skin of the negro possessed certain qualities lacking in our white skins. He painted parts of his own person black, and, taking sun-baths, observed that the painted portions, when washed, were clean and fresh, the exposed portions being raw, red, and swollen. Using sunlight, electric light, shaded lamps, he went on, himself the subject of many of his tests, until he had a very fair knowledge of the functions of light in general, and certainly a wider knowledge than any physician who had preceded him. Most notable of all, perhaps, was his discovery of the utility of the violet rays for killing the malignant bacteria of that terrible skin malady, lupus. In 1895 a patient who had suffered from this disease for eight years approached Dr. Finsen, and was electrically treated. The progress of the disease was immediately arrested, and the man eventually completely cured.

At this juncture the Finsen Institute of Light was founded, with the assistance of a grant from the Danish Treasury and generous help from a Mr. W. Jørgensen and Mr. Hagemann. In 1903 Finsen obtained the Nobel prize for medicine, and devoting practically all the money he obtained



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[By kind permission of Charles H. Kelly.]

Interior of the Lupus Clinique, showing Concentration Apparatus.

therefrom to developing his rapidly growing sanatorium, placed it practically for all time upon a sound financial footing.

The real significance of Finsen's achievement is that in the course of time all old cases of lupus will either have been cured or have died. Lengthy and costly treatment will become superfluous, since the disease will be taken in hand before it has had time to corrode or disfigure the bodies of those it attacks. In this manner the really terrible forms of lupus will become extinct.

It would be impossible to detail all the experiments which Finsen made in connection with his research work into the employment of light rays in therapeutics, but one other fact deserves mention before we pass on to record his heroic death or the subsequent development in the scope of the institution which he founded. Finsen possessed an inventive faculty which was truly amazing. At different periods of his life he patented an improved mechanism for breech-loading rifles, invented a special kind of cooking apparatus, designed an ingenious dissecting knife, and discovered a prescription for hæmatine lozenges. The idea for the modification of the trocar of a dissecting knife occurred to him under circumstances which reveal his extraordinary courage and presence of mind. It was in connection with the illness which brought about his death, and of which at that time very few definite data

were known. As Finsen had spent many years in Iceland, where the disease is prevalent, it was for some time believed to be a worm in the liver—*echinococcus*—but it was generally diagnosed as chronic heart and liver complaint, which could not be detected by the customary method of auscultation. One of the symptoms was a continually recurring abdominal dropsy. When the fluid in the abdomen had increased to an intolerable or dangerous limit, several pints of it were tapped away. This was generally done by introducing a small metal cannula through the tissues of the abdomen, which were pierced by a steel needle, the point of which projected beyond the mouth of the tube. At the opposite end of the cannula was attached a handle, so that when the trocar had been inserted the needle could be withdrawn, thereby making room for the pent-up fluid to escape.

During one of these operations the cannula had just been inserted, but Finsen, who was lying quietly on his back in the bed, saw by the look on the operator's face that something had gone amiss. He inquired as to the cause of the concern, and was informed that the handle had broken off, and that the needle had slipped down through the cannula instead of being drawn out. This was a serious predicament, for, were the needle lost in the abdomen, an operation would be immediately necessary in order to recover it, and in the state of Finsen's health this would undoubtedly have proved fatal.

Yet he neither moved nor gave signs of any anxiety. Speaking very quietly, he said to his wife, who was standing near the bed : “ Send across to the Polytechnic, or to Preisler,* and fetch a powerful magnet. I will remain perfectly still. Perhaps part of the needle is still sticking in the lower end of the cannula, in which case we are certain to be able to extract it.” Finsen’s coolness undoubtedly saved his life. The magnet was obtained and the needle easily extracted. Later Finsen so modified the construction of the trocar that a similar mishap could not now possibly occur.

The manner in which throughout his life-long illness Finsen analysed his own condition and the heroic way in which he corrected, frequently by most painful remedies, the defects of the metabolism in his body, must arouse the profoundest admiration for him both as a scientific observer and as a man. He carefully studied every symptom in order to discover its exact value in the progress of his disease. Towards the end he was so intimately acquainted with the arrangement and the needs of his own organism that he managed to maintain life and to continue the physical functions of life far longer than would otherwise have been possible ; and although his name will always be principally associated with his light treatment for lupus, the manner in which he contrived to benefit humanity by his own personal

* A famous scientific instrument maker of Copenhagen.

sufferings is as equally, if not more, deserving of recognition. Finsen died on September 24th, 1904, at the age of forty-four, after a brief but crowded life, during the greater part of which he waged a continual struggle with pain and disease in his own person. His was truly a courageous spirit, operating through a medium of broken and ailing flesh.

Since his death the institute, which is at the same time the chief result of his life's work and the monument of the faith which inspired it, has been considerably extended both in size and scope. It is divided into three sections: a laboratory, the clinique for skin diseases, and that for internal diseases. About one hundred and fifty consultations are given every day, the greater proportion of the patients being sufferers from either lupus or eczema. Upon the elaborate apparatus for the treatment of these dread diseases four patients may be placed simultaneously. It consists of connected and elevated divans, upon which the sufferers recline. Above them is the great arc light. A nurse attends each patient and manipulates the concentration apparatus, which can only be applied to small areas at a time. The light is transmitted through a prism of mountain crystal, filled with a capsule of blue-coloured water, which absorbs the heat and the red-yellow rays, allowing only the chemically active blue-violet rays to pass. The treatment lasts for an hour and a quarter.



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Photo: Paul Heckscher.

No pain or discomfort is experienced, the patients being able to read books and to speak to each other. The cure takes from three weeks in favourable instances to some years in very obstinate cases. At the present time about 10 per cent. of those treated come from foreign countries. Daily out-patients are received as well as resident patients, the latter of whom live in villas attached to the sanatorium.

In addition to the concentrated treatment, many sufferers are given intense light-baths over the whole of the body, and it is interesting to see these bathing-chambers at work. The glare of the light is blinding, but by cleverly devised shields the patient's face is so hidden that no damage to his sight can possibly occur. The heat is absorbed by a thin downward stream or wall of water, interposed between the light-source and the sufferer. After the bath the patient invariably feels exhausted and sleepy, and is then taken to a rest-chamber in which the light is toned and subdued.

In recent years internal diseases have often been treated at the Finsen Institute with considerable success, the Röntgen rays being utilised to locate the precise area which requires treatment.

In order to obtain accurate data as to the medical effects of rarefied air under all conditions of time, temperature, and wind-pressure, a very practical apparatus has been devised. This con-

sists of a large, air-tight, spherical room, in which two observers can live for as long as may be necessary. The air-pressure is slowly reduced, producing the effect of a mountain climb. At the same time the temperature diminishes, while a powerful electric fan creates wind-currents, and light screens vary the intensity and colour of the illumination. Food is passed into the chamber through a hermetically sealed tube which penetrates its walls. A telephone communicates with those outside, and two beds and a table provide accommodation for ordinary normal life, reading, writing, and sleeping. In this room observers have lived for a week at pressures corresponding to altitudes in excess of those of some of the highest mountains in the world, and exceedingly valuable data have been obtained.

In one of the rooms of the institute there exists a small collection of the personal effects of Finsen—the last letters he wrote, a review of a *Lancet* article, the glass instruments used for weighing his food during his final heroic struggle with oncoming death, his Nobel certificate, and the science medals awarded him by King Edward VII. and Queen Alexandra.

Upon the wall there hangs one of Finsen's favourite pictures, Arnold Böcklin's "Isle of the Dead." It is a dark and gloomy subject, and it is difficult to understand its influence upon Finsen, unless he regarded it as a call to his mission of

healing, an inspiration to that glorious, beneficent gospel of light which was the quota he contributed to the world's knowledge, and his addition to the sum total of human happiness.

The second of the trio of scientific names of whom we propose to give an account in this chapter is Valdemar Poulsen, the inventor of the arc and continuous-wave system of radio-telegraphy. Five years ago Dr. Poulsen was, except among his own countrymen, almost unknown to the general public. To-day he enjoys a growing international reputation, having passed in a few strenuous months from comparative obscurity into the fierce blaze of publicity and fame. In personal appearance he is of medium height though strongly built. His head in shape curiously suggests that of Lord Kitchener. The iron-grey hair stands up straight and untended. The close-clipped moustache fails to conceal the firm lips, and serves to emphasise the resolute strength of the jaw. It is a powerful face which dominates but does not repel.

The now famous Danish inventor is forty-four years old. He is the son of a judge of the highest court of Denmark. As a young man he read for the degree in Natural Sciences at Copenhagen University, but did not remain to graduate. Accepting an appointment as an assistant engineer with the Copenhagen Telephone Company, he at

once commenced to devote his attention to a study of radio-telegraphy.

In 1899 he invented the telegraphone. This is an ingenious apparatus for recording telephone conversations and repeating them at will. It can be adapted to a variety of uses. By this instrument the human voice is electro-magnetically recorded and stored on a wire or a thin disc of steel, without indentation or pin marks, and without the employment of any other agency than electro-magnetism. The record remains indefinitely, it never deteriorates, and it can be easily reproduced. If it is desired to obliterate it a simple application of a magnet instantly accomplishes this. The utilisation of this invention saves both time and money. A modification of the apparatus is employed on the Copenhagen Central Telephone Exchange to detect subscribers who abuse the company's employees. To deny one's words when one hears them repeated by this little machine is obviously futile. It may also be used as a correspondence recorder, the letters being dictated by the business man in his office, while they are typed from the telegraphone in the central typewriting bureau. As a public speech and musical recorder it possesses points of superiority to the best gramophone in existence, inasmuch as infinitely longer records can be obtained.

Shortly after the invention of the telegraphone Poulsen left the company in order that he might



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[Photo: Rosa Metz-Pasberg, Copenhagen.

Dr. Valdemar Poulsen.

be free to follow a new line of investigation that had suggested itself to him. He then entered upon that series of experiments which led him to the discovery of what are now termed the Poulsen arc and waves, upon which his system of radio-telegraphy is based.

Into the controversy as to the respective merits of "spark" and "wave" methods of wireless communication we do not propose to enter. But a general outline of the earlier work in the science is necessary to define Dr. Poulsen's position. As long ago as 1879 Clerk Maxwell demonstrated the existence of the waves now customarily designated after the German mathematician Hertz. The Italian physicist, Righi, showed how to produce these waves with the necessary strength, while the Frenchman, Branly, first conceived the idea underlying that important instrument, the coherer. It only then required a combination of well-known electrical apparatus to make wireless telegraphy commercially possible. Marconi's apparatus was the first to achieve any practical success, to be followed later by the Telefunken, the Goldschmidt, and the Poulsen-Pedersen apparatus. The Marconi, the Goldschmidt, and the Telefunken systems fall into the same category, in that they are spark methods, that is, they employ intermittent electrical discharges, technically termed either "pitch" or "musical" sparks. Poulsen's method, however, stands alone, in that it employs a continuous

wave. In the early days of his experiments Dr. Poulsen believed that the future of wireless telegraphy would lie with the system which could produce continuous waves, and accordingly directed his work to that end. He eventually succeeded in obtaining the desired objective by utilising the arc formed by a current passing between two carbons in an atmosphere of hydrogen. In a famous lecture delivered before the Electro-technischer Verein in Berlin, in October, 1906, he conclusively demonstrated the utility of his arc and waves in radio-telegraphy and telephony. Since then he has succeeded in producing a higher kilowatt power for a much less expenditure of energy than can be shown by any other radio system.

The proprietors of the Poulsen-Pedersen apparatus have claimed for it the following advantages: (1) economy; (2) a greater speed of signalling; (3) a finer capacity for "attuning," with consequent immunity from outside disturbances; and (4) the commercial practicability of wireless telephony. In America the system is already well established. Three years ago the Poulsen Wireless Corporation of Arizona purchased the various patents for the United States of America. It is now converted into the Federal Telegraph Company. It has its headquarters in California, and has built nearly twenty stations in the western States, among which is San Francisco. It possesses

a station as far east as Chicago, and one on the Sandwich Islands. Stations are in the course of erection in the eastern States, in Alaska, the Philippines, Puerto Rico, and Cuba. The Poulsen stations at San Bruno Point, California, and in Honolulu have corresponded daily for over three years, across a distance as great as the Atlantic, using only 30 k.w. power, the average number of words exceeding 2,000 per diem. Finally, the Washington Government, after carefully testing the various systems as to capacity of range, has given the Poulsen Company instructions to build a station at Colon (Panama) to correspond with the station at Arlington. The Universal Radio Syndicate is also building new Transatlantic stations for rapid telegraphy between Ireland and Canada.

With no other system is wireless telephony at present commercially possible. This is important, as although the radio-telephone will never be used in cities or to any great extent on land, it is bound to become both necessary and useful at sea. In 1908 Poulsen succeeded in telephoning without wires from Esbjerg to Lyngby in Denmark, a distance of 145 miles, using only 3 kilowatt, and in 1910 he telephoned from Los Angeles to San Francisco (295 miles), using 12 kilowatt. At Copenhagen, gramophone music played in the Poulsen station in Berlin can be distinctly heard over a distance of 215 miles.

Prof. P. O. Pedersen, the friend and colleague of Dr. Poulsen, has designed an apparatus for reading quick-telegraphy which greatly facilitates the receipt of messages. It consists of a thin gold wire moving in a magnetic field. This casts a shadow upon sensitive photographic paper, which passes at a uniform speed over a roller, producing wave-lines which are permanently imaged on the paper. Short lines indicate the dots, medium lines the dashes, and long lines the spaces of the Morse code.

Valdemar Poulsen is a strenuous worker, and no living man of eminence concentrates so much as he does. He has practically no interests outside his own chosen sphere. He believes that success in a technical profession can only be the result of immense application. The spark of genius which God has planted in a man's soul must be fanned unceasingly by self-endeavour if it is to burst into the flame which will glorify both its Creator and its possessor. He believes that wireless telegraphy is suitable chiefly for ocean work, in extensive, thinly-populated countries such as Russia, and in time of war, between operating divisions of armies. The United States, South America, Russia and China will, he considers, in the near future, prove to be the Eldorados of the wireless contractor.

Poulsen has confessed that in his school days at Christianshavn he had a great predilection for



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Prof. P. O. Pedersen.

[Photo : Elfelt, Copenhagen.]

constructing mechanical apparatus. It was his custom to make almost every instrument explained in the text-books or used by the demonstrators in the lecture theatre, and he often laughs now at the crudeness of material and construction of some of these primitive machines.

Of honours, Valdemar Poulsen possesses singularly few for a man of his attainments. In 1907 he received the gold medal of the Royal Danish Society for Science; in 1909 the University of Leipzig admitted him as a Doctor of Philosophy (*honoris causa*); and quite recently he has been presented with the most notable recognition a Danish scientist can obtain, the Medal of Merit, in gold with crown, an honour which he shares with but four others, Nansen, Georg Brandes, Sven Hedin, and Amundsen.

We now come to the third name in this trio of notable Danish scientists. Ivar Knudsen is a member of the famous shipbuilding firm, Burmeister and Wain, which first sprang into prominence under the designation Baumgarten and Burmeister, about the year 1846. Building at first only some five or six vessels annually, and retaining their workmen principally for repairing ships damaged in Danish waters, they quickly grew in influence, and after 1863 their development was extraordinarily rapid. From the first, the German shipbuilders had viewed their young rivals

with extreme disfavour, and now becoming jealous, they attempted to drive them out of the market by sending up the price of steel blocks to prohibitive limits, thus increasing the cost of ship construction to a point which they deemed would be beyond the resources of the younger firm. But the Copenhageners were not to be ousted so easily from their position. They began to buy scrap iron and to remake it into steel in their own yards, eventually becoming, to a certain degree, independent of either English or German steel manufacturers. In time they were able to erect their own smithery, and by installing powerful hydraulic presses to commence to manufacture all kinds of steel shafts, a business which has since proved highly satisfactory and remunerative.

In this manner their sphere of operations gradually widened out. The Emperor of Russia's famous yacht "Standart" was built by them. In 1902 they built a cruiser for the Russian Government, which was unfortunately destroyed by the Japanese. A big ice-breaker for use on the Gulf of Finland followed, and so by degrees this firm worked its way to the position of premier shipbuilders north of Hamburg. To-day it employs over 3,000 men regularly, and possesses the largest floating and dry dock in the north of Europe—a monster erection containing three berths.

To the general public Burmeister and Wain, and Herr Ivar Knudsen are chiefly notable as the

builders of the first motor-driven liner to take the water. The Diesel patents were bought by Knudsen on behalf of his firm in 1897, when a small test motor was erected. The trials were unsatisfactory, and it was not until 1903 that any further advance was made. They then commenced to build stationary motors for electricity, gas and water works, and pumping stations. These achieved an immediate success, the Diesel motor being both practicable and cheap for such purposes. In small towns, on farmsteads, and in outlying parts of the country, where steam or other engines can only be run at prohibitive cost, the light inexpensive Diesel motor can readily be installed. They are now very generally used in Denmark, and the market for them increases every year. Small co-operative societies often buy them, the members using the power provided at the usual rates. At the end of the year profits are divided.

The Diesel engine is a four-stroke internal combustion engine working with oil in its crude state, and of vertical pattern to save floor space and to avoid wear and tear on cylinder walls caused by the weight of the piston moving to and fro in horizontal cylinders.

There are no sparking coils, ignition plugs, carburettors or vaporisers, the ignition being effected by the mixing of hot air and oil dust. This means added safety in the working of the motor, as there

is no explosion such as occurs in other types of oil or gas engines working with igniting apparatus. Furthermore, the combustion is absolutely complete, no residue being left behind in the cylinder. The oil is used in the liquid state, not being first vaporised as in other motors.

The chief advantages of the Diesel engine, as applied to ships, are the complete and ready interchangeability of all parts, the extreme simplicity of the plant, and its absolute reliability. There is no steam to get up, and no large staff of boilermen or grimy engineers is required. A great liner can be started in less than half a minute, and the engine is always ready to begin work even after months of idleness. A few motormen can work a 10,000-ton boat round the world. The first man to realise the practical importance of this engine was the subject of this present sketch, while the first great steamship company to put one of the engines upon an ocean-going vessel was the East Asiatic Company of Copenhagen, who in 1911 placed an order with Burmeister and Wain for a large liner to be fitted with Diesel motors. The *Selandia* was the result.

She was built in fourteen months, and went out to sea a year before any other oil-driven vessel. She is 370 feet in length, 53 feet in beam, and 30 feet in depth. Her draught is 23 feet 6 inches and dead-weight capacity 7,400 tons. She is fitted with two Diesel engines, showing a total indicated

horse-power of 2,500, each engine possessing eight cylinders. Her speed is twelve knots. The *Selandia's* trial voyage was, of course, historic in the annals of shipping, as she represented a revolution in construction, and her early career was therefore watched with intense interest. From the first she proved an unqualified success. The East Asiatic Company promptly followed her up by placing orders for other similar vessels. Knudsen launched the *Christian X.* in 1912. This ship was subsequently purchased by the Hamburg-America line, and in their service has made three completely successful voyages from Hamburg to New York, then being transferred to the North South American trade, where she is still giving every satisfaction to her owners.

The Nordstjernen Company, a wealthy Swedish line, ordered six of these vessels, two of which have been launched, and the remainder are to follow by the end of 1914. The *Fionia*, built for the East Asiatic Company, and which represents the latest development in oil-driven liners, left the slips in September, 1913.

It has often been stated that the motor ship will sooner or later entirely supplant the steamship. But this is hardly possible. For long journeys and for cargo boats up to 10,000 tons the Diesel motor possesses advantages which every shipowner concedes. The cost in fuel alone on a

boat such as the *Selandia* is £60 a day less than on a steamer of the same size. Then the oil fuel being carried in the double bottom of the ship a great saving of space results, a fact which has been appreciated by tramp owners. As the oil is used up the tanks are filled by sea water, which then acts as ballast. The *Selandia* can take in her full quota of oil in two and a half hours. She can, for example, fill her tanks in Borneo, travel to Antwerp or Liverpool with a cargo of rubber, copra, or Eastern produce, unload there, and then continue the voyage to California with European manufactured goods, thus completing the journey round the world on one supply of fuel. In California she loads oil again. This feat is absolutely impossible for any steamship. The saving both of time and money is of course considerable. An oil-driven boat of the *Selandia* type can travel to Bangkok (Siam) and back four times in the year. The journey from Copenhagen to California takes forty-two days, and is generally performed without a stop. For tramps and general cargo boats, therefore, the merits of the oil engine have been sufficiently demonstrated, but for great passenger liners, where speed is of more consequence than expense, the steam engine will doubtless retain its present supremacy.

Herr Knudsen's firm now have orders for motor-driven vessels up to and including 1917, and it may therefore be justly claimed that the oil engine

ships is firmly established. The credit for this great achievement belongs very largely to the enterprising Copenhagen shipowners and ship-builders, who were the first to courageously back their opinions by putting the engine on the market and the ships on the sea.

CHAPTER XVIII

ROYAL DANISH PORCELAIN

Louis Fournier and *pâte tendres*—Frantz Heinrich Müller's Genius and Courage—Retail Business opened in Copenhagen—Müller's Technical Achievements—The "Flora Danica" Service—Blue and White Underglazed Painted Porcelain—The Period of Decadence—Hetch and the "Empire" Style—The "Arctic Night" of Danish Ceramics—Philip Schou and the Renaissance—Arnold Krog—The Paris Exposition of 1889—The Golden Age—Individuality and National Sentiment—Dalgas—The Creative Artist.

It has often been said that Denmark has no distinctive national art. This may be true when applied to the present decade of painters or sculptors. But a visit to the Royal Copenhagen Porcelain Factory demonstrates that Denmark possesses at least one supremely beautiful and national art—the art of the potter. The porcelain produced by this factory during the two periods 1775—1802 and from 1890 to the present day ranks with Sèvres and Dresden, Meissen and Wedgwood.

The first Danish porcelain was made in 1760, during the *régime* of the famous Louis Fournier. This brilliant Frenchman was in charge of the



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Interior of Royal Porcelain Factory, Copenhagen, showing Studio of Lady Artists.
(From "Royal Copenhagen Porcelain," by Arthur Haylen.)

actory erected by Frederik V. about 1758. Only some twenty authentic pieces from this period are known to exist at present. These early creations were not true porcelain, but what is called *pâte tendre*, or soft paste. The modelling, design, and colouring were imitative, and although they were of wonderful beauty for such early examples, they were not distinctly national in character. The Rournier period did not last long, concluding, approximately, with the death of Frederik V. in 1766, when, after a brief struggle against growing financial difficulties, the factory ceased work.

In 1775 Frantz Heinrich Müller, a young Danish chemist, founded a small company for the manufacture of porcelain. He obtained a monopoly in all the dominions of the King of Denmark, and it was this small company which later developed into the great factory whose name is known throughout the world wherever there are potters, or artists, or collectors. Müller early succeeded in producing some very beautiful specimens. His genius and his courage in the face of great difficulties and opposition won him the admiration of his contemporaries and the recognition of connoisseurs. During the first four years of the existence of the factory its financial position grew weaker and weaker, and it was not until Christian VII. had paid the debts and the concern had been taken over by the State that it may be said to have become firmly established. Müller con-

tinued to manage the factory, and in 1780 a retail business was opened in Copenhagen, an event which proved the turning point in the financial history of the firm. Müller's productions began to be known, and in time he came to be acclaimed a genius in the ceramic art. Towards the end of the Müller period the Royal Copenhagen Factory took its place beside the other great factories of Europe.

The technical achievements of this master potter were to perfect the body and the glaze of the porcelain, to introduce exquisite gilding, and to create a national style. In 1790 the importation of foreign porcelain into Denmark was prohibited. In 1801 Müller retired from the factory.

Between 1790 and 1802 was executed the famous "Flora Danica" service as a gift from the Crown Prince Frederik to the Empress Catherine II. of Russia. It was designed as a magnificent present to a powerful monarch. The death of Catherine in 1796 did not, however, stop the execution of the work, and when it was finally completed it numbered between two and three thousand pieces. Upon this porcelain is painted, in natural colours, representations of all the principal flora of Denmark. The work was carried out under the supervision of the botanist Theodor Holmskjöld and the painter A. C. Bayer. Notwithstanding its scientific accuracy and a certain stiffness, which was perhaps unavoidable, it remains the greatest

chievement in Danish ceramic art, and may be justly compared with the celebrated *pâte tendres* Sèvres service (1778) and the Wedgwood dinner service (1774), both of which may now be found in the Imperial Palace of St. Petersburg.

Blue and white underglazed painted porcelain now began to be recognised as the characteristic national production of the Danish factory. The original design is said to be of Chinese origin. Mr. Arthur Hayden, to whom all art connoisseurs are tremendously indebted for his authoritative book on Copenhagen porcelain, has compared the Danish copy and the Chinese design by saying that they bear the same relationship to works in literature where the translation is generally admitted to be greater than the original.

Following the retirement of Müller in 1801, a period of decadence set in. In 1807, at the bombardment of Copenhagen by the English, much of the factory and many of its finest treasures were unfortunately destroyed. Evil days followed both financially and artistically. In 1824 Herr G. Hetch became director, and the so-called Empire style was introduced. The designs were both heavy and artificial, and for more than fifty years what has been described as the "Arctic night" of Danish ceramics held the luckless factory in its relentless grip.

At length, however, in 1883, Philip Schou became manager, and two years later Arnold Krog was

appointed art director. These two men between them effected the renaissance of Danish porcelain. Schou was intensely modern. He erected workshops containing the latest equipment. His kilns were of the newest design. He spent money like water. He developed a new technique, and in 1889 the Copenhagen products gained a triumph at the great International Paris Exposition which astonished and confounded the artistic world. The older factories in Europe found themselves hopelessly antiquated in the face of the intense and beautiful modern work of the new Danish potters. Copenhagen had added a fresh and glorious page to the history of the development of European ceramic art.

The years between 1890 and 1902 are regarded as the golden age of the modern renaissance. Classic, stereotyped, and ornamental styles were abandoned. A realistic gripping of nature was sought after and obtained. National sentiment became the dominant note. Schou and Krog created a ceramic art forceful and original, temperamental and poetic, unfettered by tradition and, most important of all, Scandinavian in its aim and outlook.

To-day Copenhagen is the leading porcelain factory in Europe. Herr Frederik Dalgas, the present director, is a worthy successor of Schou and Müller. The spirit of these mighty potters is faithfully venerated, though much new and original



To face p. 250.]

Old Copenhagen Porcelain Figure Groups: Market Woman with Fruit and Lobster-Seller.

(From "Royal Copenhagen Porcelain," by Arthur Hayden.)

work is being done. It is a notable characteristic of the Danish people to fearlessly and continually allow their individuality its fullest scope. With this object in view, each artist, designer, painter or sculptor in the factory is permitted a free hand to work out his own ideas. His work-rooms are as beautiful as his products. He is, indeed, a free and unfettered artist in the completest sense. Perhaps that is the reason why his productions, which may now be found in every museum or collection of any importance in the world, represent the highest type of modern national and creative art.

CHAPTER XIX

THE PRESS

General Characteristics — *Berlingske Tidende* — The *Nationaltidende* — *Vort Land* — *Politiken* — The Harmsworth of Danish Daily Journalism — The Introduction of the English System — *Extrabladet* — *Social Demokraten* — *Köbenhavn* — *Hövedstaden* — The Provincial Press — Periodical and Technical Journals.

DANISH newspapers and periodicals afford many interesting points of comparison with the journalistic enterprises of the larger countries. In the first place, they are of a more local and chatty character ; there is no large background—everything is viewed at extremely close quarters. In Copenhagen many mediocrities, who in London or Paris would never attract press notice, are often interviewed ; their sayings are reported in full, while their photographs adorn the pages of the principal dailies. This is perhaps inevitable in a small country, but it often proves very amusing to the foreign visitor. If a *première* at one of the theatres is to be criticised, one usually finds a great portion of the report devoted to an account of the notabilities present, with minute descriptions of the toilettes of the ladies. A sick-club or a local bank holds its annual meeting, and matter which

an English paper would relegate to a few lines on the financial page is in Denmark fully reported, with photographs of all the secretaries, managers, directors and lawyers concerned.

Notwithstanding these little peculiarities, the press of Denmark is in an exceedingly healthy condition. The quantity and the style of the presentation of home news is admirable, while the leading papers are well informed and fairly quick with their service of foreign news. The majority of them are well printed, and in this respect compare favourably with the German papers. The total number of dailies in Denmark is 300, which, in relation to a population of less than 3,000,000, is a strikingly high figure.

The oldest of the daily papers at present in existence is the *Berlingske Tidende*, which was established in 1749, thirty-five years before the *Times* appeared in London. It is a moderate Conservative organ, deriving its support principally from the great landowners who constituted the majority of the Upper House. It has belonged to the Berling family ever since its foundation. Its specialities are foreign and financial news, and as it has very intimate connections with the various European bourses, it commands a great circulation among the business people of the Danish capital. It has morning and evening editions, the former constituting the finest advertising medium to be found in Scandinavia. On political and economic

questions it is somewhat ponderous, but it deals with literature, music, art and the stage in a more entertaining manner.

The *Nationaltidende* is a journal with somewhat similar characteristics, but it is much younger. If the *Berlingske Tidende* represents the great landowners, the *Nationaltidende* may be said to be the organ of the wealthy classes in the towns. This paper also has two big editions daily, and several smaller and cheaper editions, devoted to special purposes. The morning and evening editions of both *Berlingske Tidende* and *Nationaltidende* cost 5 öre, or about two-thirds of a penny, per copy. Both papers issue a special weekly sheet for women, and in their ordinary editions devotes special sections to law, shipping and agriculture.

The third Conservative paper in Copenhagen is *Vort Land*, the organ of the extreme wing of the party. In the main this journal supports the policy of the late ultra-Conservative leader, Estrup, and although politically it has some influence, it does not possess the strong financial backing of the two others mentioned.

The Liberal-Radical party have only one paper in the metropolis, and that is the well-known journal *Politiken*. Next to *Social Demokraten* it has the greatest circulation in Denmark, about 50,000 copies daily. It sprang into existence about thirty years ago, with the then Radical leader

ggo Hörup as editor. Later it came into the hands of Dr. Edvard Brandes, and now it is controlled by Herr Cavling, the Harmsworth of Danish daily journalism. The *Politiken* is the most modern and cosmopolitan newspaper in Scandinavia, and among those who regularly contribute to its columns may be found many of the most important names in Danish literature and art, political and social movements. This journal was responsible for the introduction into Denmark of the peculiarly English system of full pages, prominent headlines and illustrations.

Herr Cavling belongs much of the credit for the present strong position of his property. He has throughout been more interested in modernising Danish methods than in gaining political influence for himself. And it has thus come about that the circulation of the *Politiken* is not by any means limited to the party whose organ it is. Many people read it for its smart and lively style, its political editorials not being considered so important as its exceedingly clever presentation of general home and foreign news.

The same may be said of the afternoon paper *Fredebladet*, the *Evening News* of Copenhagen, a paper commenced during the Russo-Japanese war by the proprietors of *Politiken*. It gained immediate success, and now has a circulation exceeding 50,000, an immense figure for Denmark. It costs about one farthing, and appears in the

streets of Copenhagen at three and six o'clock in the afternoon.

Social Demokraten, the paper with the greatest circulation in Scandinavia, is a Socialist-Labour organ of great weight in the trade unions and among the working classes in Copenhagen and the larger towns. It sells 60,000 copies daily.

The Centre party, although it is not by any means flourishing in the capital, yet controls a daily journal, *Köbenhavn*, with a powerful following. This paper costs only 3 öre, and, like *Politiken*, is remarkable not so much for its editorial policy as for its smartly written news matter. Its circulation is practically restricted to the middle classes. Upon its staff are many distinguished journalists.

A new daily appeared about two years ago with a strongly national and religious policy. It is called *Hövedstaden*, and was at first run upon non-party lines, but has latterly inclined to the Centre group. The chief point in its propaganda appears to be an agitation in favour of a stronger military defence of the country.

Outside Copenhagen there are many daily newspapers almost as influential as those of the capital. The chief of these are the *Aarhus Stiftstidende* and the *Aalborg Stiftstidende*, both of them old, Conservative, and fairly wealthy so far as newspaper properties go in Denmark. The *Jyllandsposten* is a morning paper of good standing published in Aarhus. It gives the best commercial and foreign

elligence of all the country newspapers. Other journals of a similar character are the *Aalborg Amtstidende*, the *Aarhus Amtstidende*, and *Fyens Tidende*. Finally, there is the Berg press, an important group of papers spread over the whole country. They were founded by the old Centre, Berg, and are now controlled by his son.

The periodicals and technical journals are not numerous. For the most part they have to struggle fiercely for existence, and cannot be compared to those of England, Germany, France or the United States. *Verden og Vi* is the most modern and interesting. The *Familie Journal* and *Hjemmet* are popular weeklies, each with a circulation exceeding 200,000. *Illustreret Tidende* imitates such papers as the *Graphic* and the *Illustrated London News*. There are only two good monthlies, *Tilskueren* and *Gads danske Magasin*. But they are both inclined to be academic rather than popular, and their circulation is therefore more limited than it might otherwise be. Finally, mention must be made of *Klods-Hans*, the Danish *Witch*, a cleverly conducted journal.

PART V
FINANCE AND INDUSTRY

CHAPTER XX

STATE AND MUNICIPAL FINANCE

portions of Direct and Indirect Taxes—The Acts of 1903 and 1912—The Tariff Law of 1908—Fluctuations in the Relative Values of Land—Uniform and Quinquennial Assessments—Capital Value of Estates in Denmark—Graduated Income Tax and System of Abatements—Limited Companies—Legacy, Custom and Consumption Duties—Tax on Motor Cars—Amusement Tax—Railways—The Post Office—Lotteries—The National Bank—Telegraphs—Expenditure on Social and Productive Purposes—The Fortification of Copenhagen and the Naval and Military Charges—Support of Trades and Industries—Agricultural Subsidies—Reclamation Works—Fishing, Lightships, Lighthouses, Mail Routes, etc.—Hospitals, Lunatic Asylums and Old Age Pensions—Educational Grants—Interest on the National Debt—Analysis of the Danish Budget—Municipal Income Tax—Debts of Danish Municipalities.

As in the Budgets of other countries, so in that of Denmark, the taxes constitute the major portion of the State's income. Of these taxes three-quarters are obtained indirectly; the remaining quarter is in the form of direct taxation. Per head of the population the Dane suffers only one-fifth of the average tax which the Englishman pays.

The most important of the financial reforms

carried through in recent years in Denmark were those embodied in the Acts of 1903 and 1912 and the tariff law of 1908. The Act of 1903 was part of the great scheme to remove the economic burdens on the land, and it was carried through at the same time as the abolition of ecclesiastical tithes. Before 1903 taxes on property and land had been payable on a valuation made in 1840, and in this matter the Danish reformer experienced precisely the same difficulty that we are experiencing in England to-day, a fluctuation in relative values. Land which in 1840 possessed little or no value had now become very valuable, yet it paid no tax ; on the other hand, land assessed highly in 1840 had diminished in value, and was consequently paying a tax which was both disproportionate and unjust. To get over this difficulty a system of quinquennial assessment was devised, and a uniform tax of 1·1 per thousand imposed on the estimated capital value of all estates—including lands and buildings—under the new assessment. The present figure for the capital value of all estates in Denmark stands at £350,000,000.

Direct taxation on income is levied at a rate of 1·4 per cent. per annum for incomes under £55, increasing according to a graduated scale to 5 per cent. for incomes over £11,000. The first £45 is always exempted from taxation, while there are additional allowances of about £5 for each child under the age of fifteen years.

he profits of limited companies are taxed at rate of 3 per cent. after the provision of a er cent. dividend for the shareholders. This pany tax brings in about 1,250,000 kroner 0,000) annually to the Treasury.

f indirect taxes legacy, custom, and consump-
t duties are the most important. The legacy
ies have recently been increased, and are now
rged at a rate varying from 1 to 3 per cent.,
ording to the amount of the estate, provided it
olves upon the children of the legator ; from
o 6 per cent. if it devolves upon the parents or
thers and sisters of the legator ; from 7 to
er cent. if it comes to grandparents, uncles,
nts, or relations of the same consanguinity as
se ; finally, from 10 to 12 per cent. if it is
ueathed to still more distant relatives, or per-
s who are not relatives at all. Legacies to
pitals are uniformly taxed at the rate of 10 per
it.

Customs duties in Denmark provide about a
rd of the State's income, notwithstanding that
Act of 1908 reduced the tariff considerably. At
present time most of the necessary articles of
ly use are admitted free, *e.g.*, foodstuffs, meat,
r, coal, petrol, while the duty on manufactured
tal goods has been reduced by about one-half.
e Act, however, increased the tobacco duties,
d imposed a heavy tax upon imported cigarettes
from 10 to 25 per cent. of the value. Speaking

generally, Danish customs dues are levied according to weight, but in some instances they are specifically charged according to value. Under this 1908 Act the dues average nearly 5 per cent. of the total imports. Formerly the figure was nearly 8 per cent.

So far as consumption duties are concerned, spirits are rather heavily taxed, although the duty on pure spirit is only about one-tenth of that charged in England. The amount is fixed at 3s. per gallon, but the greater part will be repaid on a declaration that the spirit will not be used for drinking purposes. The duty on beer is one of the highest in the world, and as Danish people consume great quantities of this liquor, the yield is important to the Treasury. Finally, sugar is dutiable, both imported and home-produced.

There is a tax on motor cars, but it is not important. Motor lorries or haulage waggons for commercial purposes do not suffer so heavily in this respect as cars kept for pleasure. A 10 per cent. amusement tax has recently come into force. It applies to theatres and concert-halls. A heavier tax of 20 per cent. is levied on biographs, music-halls, circus shows, etc. Both the taxes on motor cars and on amusements are divided equally between the State and municipalities.

The remainder of the income of the Danish Treasury is derived from the railways, the Post Office, the lotteries, and the National Bank. More

in one-half of the railways and all the great trunk-lines belong to the State. The income last year exceeded £350,000, but owing to the recent round increase in fares, it is anticipated that the profit for the forthcoming and subsequent years will reach from £500,000 to £550,000. The capital invested in Danish State railways amounts to £5,000,000. The total mileage is 2,000. Some lines, although not State-owned, are partially State-supported in that the Treasury have acquired from 25 to 75 per cent. of the shares.

The Post Office and telegraphs are not proportionately so profitable as in England. Together they bring in about £100,000 a year.

Another much-discussed source of income is the levy on the State lottery and the stamp duty on the lottery tickets. The former brings £85,000 and the latter £100,000 a year. This lottery has existed for some 150 years, and although abolition has often been mooted, it is still maintained, the defence being that were there no State-conducted and genuine lottery those people who will gamble would throw away their money in fraudulent German or Austrian lotteries. This argument is supported by the interesting fact that thousands of Danish lottery tickets are sold annually in Sweden, where this form of speculation is permitted. The Swedish Government is reported to be considering the advisability of re-establishing its own lottery. It is quite certain

that no more money is wasted on this form of gambling in those countries where it is carried on than is, for example, spent in backing horses in England, while the lottery, if well conducted, has certain advantages which cannot be discovered in connection with the turf in our own country. The profits go to the State and not to bookmakers, and granted that a very large section of the public will gamble, there is much to say for a system of organised State lotteries.

In addition to the above lottery, there is in Denmark another which is called the National Industrial Lottery, in which the prizes are products of Danish manufacture. The profits are devoted to supporting evening schools for young hand-workers. Two smaller lotteries are privately controlled, but must contribute a fixed proportion of their income, the one to (a) the Treasury, and (b) the support of small holders, and the other to the Treasury of the Danish West Indian Islands.

The final item upon the income side of the Danish Budget is an amount of £45,000 received annually from the National Bank for its sole right to issue notes. This sum is fixed at £42,000 with an addition of one-quarter of the profits after the shareholders have received a 6 per cent. dividend and certain allocations have been made to the reserve funds of the Bank.

Coming now to the expenditure of income, we find that the Danish State in comparison with other

Denmark spends a much greater proportion upon social and productive purposes, and less upon military and unproductive purposes. The ordinary military expenditure has during the last forty years only increased from 10s. to 12s. per inhabitant, a striking contrast to the figures of England, France or Germany. It is true that an Act of 1899 provided an extraordinary expenditure of £750,000 for the fortification of Copenhagen, to be spread over a number of years. Notwithstanding this sum, the military and naval charges amount together to only one-quarter of the Budget.

Considerable sums are spent in supporting certain trades and industries. Agriculture receives annually some £225,000; planting of heath land and reclamation works appropriate £100,000; fishing receives £25,000 (including insurance for boats, boats and tackle); £150,000 is allocated to lightships, lifeboat services and the like in connection with the work of safeguarding the dangerous West Jutland coast. The mail routes between Denmark and England are also supported by substantial subsidies, in order to give the Danish farmers an opportunity of opening the valuable English market for their dairy produce.

Social work takes 30 per cent. of the State's income, 5 per cent. being devoted to old age pensions. Hospitals and lunatic asylums receive between 6 and 7 per cent., national folk-schools

the same amount, scientific education and the arts about 5 per cent. The interest on the National Debt appropriates 10 per cent.

Summarising, it may be said that the following table represents roughly the allocation of the funds of the Danish Budget :—

	Per cent.
To the support of trade and industry	
directly	10
For purposes of social betterment	
and amelioration	30
Army and navy votes	30
Administration (Civil Service, police, pensions, etc.)	20
Interest on National Debt	10

There has not been a surplus on the Budget for many years, owing partly to the extraordinary military expenses already mentioned, and partly to the very considerable support which the Treasury gave the banks during the Alberti crisis in 1908. New loans have recently been raised, and the National Debt has therefore been greatly increased. In 1864, after the German war, it was about £15,000,000. Between 1864 and 1880 it was diminished to £10,000,000, partly at the expense of the reserve funds and partly by the fact that Sleswick and Holstein took over a portion. In 1890 the debt stood at about the same figure as in 1880, but between 1900 and the present time it has again risen, and now stands at £19,500,000.

The greater part of the debt is placed in France, in which country Denmark obtains most of her loans: £6,500,000 is at 3 per cent.; £9,000,000 at 3½ per cent.; while the last £4,500,000 was obtained at 4 per cent. Speaking generally, most of the loans commanded good prices, *e.g.*, from 96 per cent. for 3½ per cent. bonds. The most recent loan, however, was not obtained upon such favourable terms, the price being only 93½ per cent. Against the debt the Treasury owns real property to the value of £50,000,000 in land, buildings, etc.

It was generally believed in financial circles that new loans would be necessary for a period of several years, and last year's Budget showed a surplus. The yield from the new taxes will probably be more than at first estimated. As compared with other countries, the Danish National Debt is not large. It works out at £6 10s. per inhabitant, and in this connection it must not be overlooked that Denmark has invested much money in such undertakings as railways and small buildings, which in England are left to private initiative.

Turning to local finance, we find that the income of the municipalities is derived from rates and from municipal enterprises, such as trams and water, gas, and electricity works. The rates are levied both on persons and properties, the corporation being free to decide the amounts necessary to

meet the expenses of the year. The municipal income tax permits of an exemption of the first £50, and an additional allowance of £5 for each child. Over and above these amounts the rates, for example, in Copenhagen vary from 1 to 6 per cent. according to the extent of the income. If 6 per cent. is insufficient to cover the year's expenses, it may be increased. But if the increase reaches 20 per cent. of tax received for the preceding year, an appeal must first be made to the voters, the new council then deciding whether the proposed increase be sanctioned or not.

In provincial towns a somewhat different method obtains. The rate is the same for all incomes, but it varies from 5 to 10 per cent. in different parts of the country. The assessors are permitted to add up to 25 per cent. to the nominal amount of income for the purposes of taxation, or, on the other hand, to reduce the amount by 65 per cent. in certain well-defined cases. Unmarried persons or persons with abnormally large incomes have 25 per cent. added to their incomes for the purpose of assessment, while large families with small incomes receive a corresponding reduction in the assessment. Each person is compelled by statute to make a return of his income to the appointed assessors, failing which it is officially estimated, and the delinquent has to pay on the estimated figure. In many municipalities a further 50 per cent. is added to the assessment value if the income is

ived from interest on bonds or shares, 35 per cent. if from house or landed properties.

The total debt of Danish municipalities is 1,000,000, most of which is with the Danish banks. The debt has increased very much in the last twenty years, owing to the fact that most municipalities now own and control gas, water, and electricity works, schools and hospitals.

CHAPTER XXI

THE BANKS

e National Bank—Disorganised Condition of Danish Finances before 1818—The State becomes Bankrupt—Object of the National Bank—Mortgages on Landed Property—Gold Reserve—Notes—Characteristics of Danish Banks—The Private Bank of Copenhagen—C. F. Tietgen—Successful Promotion of Public Companies—The Landmans Bank—The Handler Bank—Liquidations—The Effect of the Alberti Crisis—Causes of the Monetary Strain of 1907—The Crash of 1908—Speculative Financiers—The Position To-day—Savings Banks.

THE leading financial institution in Denmark is the National Bank, a private bank with a capital of £1,500,000. It was established in 1818. Before that time Danish finances were unorganised and in a state of unusual confusion. A private bank which had been founded a century earlier had become bankrupt and been taken over by the State, which in its turn had become bankrupt in 1813. The result was that the country was flooded with paper money with no funds to cover it. At this juncture the National Bank came into existence with the object of repaying the notes then in circulation with 10 per cent. in notes issued by itself. As security for the new notes a mortgage of 6 per cent. was laid upon all the landed

property in the country, the properties receiving shares in the Bank according to the proportionate amount of the mortgage. This experiment proved completely successful. After a few years the new Bank began to pay dividends, and has done so ever since. It had been granted, for a period of ninety years up to 1908, the sole right to issue notes in Denmark. In 1908 this monopoly was renewed for a further thirty years, on condition that the Bank always keeps a gold reserve of at least one-half of the nominal amount of the notes issued, and possesses in addition easily realisable securities covering the remaining half in the proportion of 125 kroner to each 100 kroner of notes issued. The Bank pays annually about £40,000 to the State for this privilege, and a further 25 per cent. of the profit after 6 per cent. has been released in dividends to the shareholders. Under special circumstances the stipulation as to the proportion of gold reserve may be changed by arrangement with the Government, but in that case the Bank is under an obligation to pay to the Treasury a levy of 5 per cent. per annum on the amount which is not covered. Of the five governors two are personally nominated by the King. Nearly £8,000,000 in notes has been issued, to cover which the Bank possesses some £5,000,000 in gold, a reserve greater than that stipulated. The dividend is generally between 7 and 8 per cent. per annum.

For about thirty years the National Bank was the only institution of its kind in Denmark, and was not until 1846 that a second bank was founded. Yet now there are more than 150 banks in the country. Many towns of from 3,000 to 10,000 inhabitants possess two banks. They are generally small, however, and purely local in their operations. The great banks operate only in the capital, and do not, to the same extent as English banks, establish county or provincial branches.

The Private Bank of Copenhagen, which has a paid-up capital of £2,000,000, was founded in 1817 by Herr C. F. Tietgen, perhaps the greatest Danish financier of modern times. In the years following 1864, when there was an abnormal growth in Danish industry, and when commercial development proceeded with tremendous rapidity, this Bank was the leading financial institution in Scandinavia, and through it Tietgen promoted these great and successful undertakings, the Great Northern Telegraph Company, the United Steamship Company, and the Danish Sugar Manufactory, each of which now has a capital of over £1,000,000. The richest Bank in Denmark at the present time is the Landmandsbank, established in 1871 by Herr I. Glückstadt, a financier who is also connected with a great many of the most successful Danish commercial enterprises: the East Asiatic Company, the Copenhagen Free Harbour, etc.

Herr Glückstadt was succeeded by his son, Herr E. Glückstadt, a man of great initiative and energy. The Landmandsbank has a capital of £4,000,000, and, unlike most other Danish banks, operates about twenty branches in the country.

The third great Bank in Denmark is the Handels Bank, controlled by Herr Damm, the greatest living authority on banking and finance in Denmark. This institution has a capital of £1,500,000, with a reserve of £500,000, and may be termed the Bank of the great co-operative undertakings.

As has already been stated, the country banks are small, the largest possessing a capital of but £350,000, while the general average capital may be computed at from £5,000 to £20,000. Notwithstanding their smallness, there have only been some three or four liquidations during fifty years.

The Alberti crisis led many observers to suppose that Danish finance was essentially unsound. An impartial examination however proves that in the main the financial institutions of Denmark have been built up and developed along normal lines, and that to-day they are in a position relatively as strong as the leading banks in the larger States of Europe.

The underlying cause of the monetary strain of 1907 is not far to seek, and its effect can be better understood now than formerly. The years preceding the crisis had been years of unexampled

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prosperity, of commercial expansion, and of rapid increase in the number and output of industrial undertakings. To meet the changed outlook several new banks sprang into being, the principal of which were the Central Bank, the Detailhandler Bank, and the Grundejer Bank. At first these institutions were carefully managed and paid well. After a time, however, their directors, lulled into a sense of false security by good returns, and honestly believing that this abnormal period would continue, endeavoured to extend their operations, and instead of preparing for the inevitable reaction, as did the older banks, sought to advance more rapidly than natural development warranted. They financed a host of infant undertakings, and even engaged in building operations on a large scale. Almost all this business has since proved to be sound, but at the time it was more than the young banks could stand. In order to obtain money to finance their various schemes they increased their capital and offered higher rates for deposits than did the older banks. Then in 1907 the discount reached an unparalleled height, money became scarcer and scarcer, and the new banks, whose investments were in securities upon which they could not realise, were of course the first to feel the effect of the tightened market. The first institution which failed to meet its obligations, and was compelled to close its doors, was the Central Bank, the smallest of the three above mentioned.

It was eventually taken over by the Private Bank, which guaranteed the depositors, who thus lost nothing. The shareholders, however, suffered a loss of 95 per cent. of their holdings. In the liquidation proceedings it appeared that the Bank itself possessed the major portion of its own shares, having purchased them in the open market in order to send up the price. The public, therefore, were not badly hit in this particular failure. But half a year later, in the early months of 1908, came the great crash, the Detailhandler Bank and the Grundejer Bank simultaneously stopping payment. In order to allay somewhat the resultant panic, and if possible to prevent a general run on the other Copenhagen banks, the Government immediately entered into negotiations with the old-established banks in the metropolis. They were five in number. The outcome of the negotiations was that the Treasury, in conjunction with the five banks, agreed to indemnify all depositors, the State taking over one-half of the liability and each of the five banks one-tenth. In this way the depositors were saved from loss. The Grundejer Bank will ultimately be able to pay a composition of some 4s. in the pound to its shareholders, but the shares of the Detailhandler Bank are scarcely worth the paper they are inscribed upon. The total liability thrown upon the Treasury and the five banks by this crash was about £1,500,000.

Since 1908 Denmark has been slowly recovering

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on the effects of the lamentable speculations of the younger financiers, and to-day the position appears to be thoroughly sound. The older banks have now recovered their prestige, and, speaking generally, the methods employed both in finance and in business are more conservative than they were before the crisis.

The Savings Banks at the present moment maintain deposits of more than £45,000,000, and possess reserves exceeding £3,000,000. They are run on somewhat different lines from the Post Office Savings Bank in England, being largely non-operative. The profits are employed partly in accumulating a reserve, and partly for benevolent purposes. The Savings Bank Act contains provisions regarding the management of the staff, the number and status of the auditors, and compels all such banks to submit their books to a periodical examination by the State Savings Bank Inspector. The moneys deposited in the banks must only be invested in certain specified securities, principally land and credit union bonds, while bills must not be discounted in any circumstances. There are special Savings Banks for domestic servants, supported by the State, giving the usual rates of interest, and affording absolute security.

CHAPTER XXII

THE CREDIT UNIONS

Objects of Credit Unions—Methods of Borrowing—Repayments—Interest—Deposits—Expenses of Administration—Credit Union Bonds—Market Prices—Old and New Series Bonds—Closed Series—Statistics—Reserve Funds—Annual Losses—Small holders' Credit Unions—Government Guarantee—Sale of Bonds in Foreign Countries—The Kongeriget Danmarks Hypothek Bank.

THE credit unions, which as financial institutions are peculiar to Denmark, are societies formed by borrowers, chiefly landowners, to obtain money at reasonable rates and under the most favourable conditions. The method employed is as follows. A person who desires to raise a loan applies to one of the many existing unions. His property is inspected and its value appraised. The board of the union can then grant a loan up to a little more than one-half of the value of the property. In theory anything up to 60 per cent. may be granted ; in practice the loan is generally for an amount less than 50 per cent. The borrower then elects to pay either 2, $2\frac{1}{4}$, or $2\frac{1}{2}$ per cent. of the loan each six months. The sum paid at the end of each half-year is always the same, and it therefore follows that as the interest decreases the amount

repayment of capital proportionately increases. The interest is calculated at $1\frac{3}{4}$, 2, or $2\frac{1}{4}$ per cent. While the rest of the demi-annual payment is cumulated in a sinking fund for the repayment of the loan. Often the union will insist upon a deposit of from 2 to 5 per cent. being placed to a reserve, which amount is repaid when the loan is finally liquidated, and the borrower must pay a small sum towards the expenses of administration of the union.

A distinctive feature of these societies is that the borrower does not receive his loan in cash, but in bonds issued by his union, and these he must put on the market through the medium of the Stock Exchange, running the risk of their not realising as much as he expected. In most cases the bonds are quoted at less than their face value. For example, the present prices for $3\frac{1}{2}$ per cent. bonds are about 85; for 4 per cent., about 90; and for 5 per cent., between $97\frac{1}{2}$ and $98\frac{1}{2}$. The prices, moreover, vary considerably, some unions commanding better quotations than others, while old series bonds realise better than the newer series.

It thus often happens that by taking a greater loan at the low rate of interest the borrower eventually only receives the same sum as he would have received had he accepted a smaller loan at a higher interest, for it will be seen that the loss sustained is much greater when selling the low interest bonds on the market.

The loans are repaid to the union in sixty years. They are divided into series, and the members of one series are responsible individually and collectively for the debt of the series, but such liability is limited to the value of their real or landed property. When a series has reached a fixed amount, which varies between five and ten million kroner, according to the union, it is closed, and the bonds of a closed series then become more valuable than those of a new or partly subscribed series in that there is a greater chance of one of the bonds being drawn for payment. They are always repaid in full, whatever market price has been obtained for them.

There are eleven credit unions in Denmark, each of which operates within its own definite area. Together they have granted mortgages over 224,000 properties, to a total value of some £91,000,000. The reserve funds of the combined unions exceed £3,500,000. The annual loss during the last ten years has been one-third per cent. This has been met out of the reserve funds. Only once during fifty years has it been necessary for the members to subscribe more than the fixed rates of interest.

Two of the credit unions exist specially for the benefit of small holders, and have a Government guarantee up to 4 per cent. interest on their bonds, which accordingly are quoted a little higher on the market.

About £20,000,000 of the various credit union bonds have been sold in foreign countries, and, in order to obtain the best prices for them abroad, the Kongeriget Danmarks Hypothek Bank has been established, with a capital of £1,100,000, raised by the State. This Bank buys Danish credit union bonds, afterwards converting them and issuing its own bonds in their place to the value of those bonds which it has purchased. These Hypothek bonds are then placed on the foreign market and command exceptionally good prices. The reason for this procedure is that as there are so many bonds and denominations of credit union bonds, and as it requires a somewhat lengthy acquaintance with them to become familiar with their respective values, the foreign investors prefer to have the bonds amalgamated and issued to them by a responsible bank, which is in a position to undertake all differentiations and valuations. The Hypothek Bank is seven years old, and has sold some £3,000,000 bonds to France alone, at rates of interest varying from $3\frac{1}{2}$ per cent. to 4 per cent. per annum.

CHAPTER XXIII

DANISH COMMERCE AND INDUSTRY

Geographical Position as a Commercial Factor—The Hanseatic Union—The Netherlands—The Eighteenth Century—The Royal Danish Porcelain Factory—Destruction of the Mercantile Fleet—Denmark Bankrupt—The Struggle with the Norddeutscher Merchants—The German War of 1848—Effect of the Opening of a Direct Shipping Line to England—The Hamburg Crash of 1857—Removal of the Toll on Shipping passing Elsinore—The Rise of Copenhagen—Beginning of the Great Trade Boom—Limited Liability Companies—Shipping Concerns—The Free Port—The United Steamship Company—The East Asiatic Company—The Siam Steam Navigation Company—Mount Austin Rubber Estates, Limited—Importation of Soyn Beans from Manchuria—The Danish-Russian Line—C. K. Hansen—Lack of Coal—Dearness of Labour—The Theory of Specialisation—Messrs. Burmeister and Wain—F. L. Smith and Company—Bing and Gröndahl—Tariff on Articles for Home Consumption—Effect of Co-operation—The Agricultural Group—The Danish Sugar Factories—Monopolies—Great Northern Telegraph Company—Copenhagen Telephone Company—Gas, Water, Electric Light, and Tram Companies—The Danish Petrol Company—Mönsted Margarine, Limited—The Sulphuric Acid and Superphosphate Factory.

THE relatively favourable position of Denmark, in close proximity to the Baltic and the North Sea ; the geographical centre of an important area

4 DENMARK AND THE DANES

embracing Norway, Sweden, Finland, Russia and Germany ; divided into islands by deep and easily navigable belts—these should have sent her to the front, industrially and commercially, at a much earlier date than has actually been the case. Notwithstanding all her advantages, practically the role of the commerce of the North was commanded for many years by the Hanseatic Union, at mighty and unscrupulous alliance of German cities, of whose vast magnificence and riches evidences may still be seen in the old mercantile places of Hamburg and Lubeck and Bremen.

With the decline of the Hansa States the commercial centre of gravity moved to the Netherlands, and it was not until the eighteenth century, during a period when the Dutch supremacy was at the down grade and England had not yet attained her great monopoly, that Danish trade first began to flourish. This century was a time of uninterrupted peace for the Danes, and as the greater States were for the most part embroiled in continual warfare, it proved the beginning of a commercial renaissance for Denmark. The Treasury generously assisted the private speculator. New companies were founded, new colonies acquired. In the West Indies, in Guinea, and in India the Danish merchants began to make themselves felt.

It is true that many of these earlier successes proved to be of but a temporary nature. But it was a beginning, and many speculators and business

houses grew wealthy. In the Christianshavn district of Copenhagen may be seen to this day some of the fine patrician residences built by the merchant princes of that period. Perhaps the most renowned of the companies of those days was the Royal Danish Porcelain Factory, which still exists, and which annually brings a great deal of money into the country. It has also contributed in no small measure to the creation of a national art in Denmark.

A prosperity based upon these unique circumstances, however, was bound sooner or later to receive a set-back. In the early part of the nineteenth century Denmark found herself at war with Sweden and England, and in a period of but nine years almost all the Danish mercantile ships were either captured or destroyed. It is computed that in the year 1800 the merchants of Denmark were the proprietors of no less than 1,100 ships. In 1809 this number had been reduced to 128, the English having taken or fired something like a thousand vessels. It can scarcely be a matter for surprise that with the loss of the fleet between 1800 and 1809 and the secession of Norway in 1814, in conjunction with the expenses of two costly wars, the Danish State became bankrupt, and her new-found commerce passed once more into the hands of the waiting Hamburgers.

For half a century we witness an heroic struggle, an attempt at reorganisation, a keen and spirited

contest between the Danes and the Norddeutscher merchants. The German war of 1848 fanned the national sentiment ; while a direct shipping line to England, opened in the same year, proved the beginning of a less artificial and more lasting prosperity. In the period 1848—1860 the imports from England increased by 250 per cent., or more than 20 per cent. per annum. The financial crash in Hamburg in 1857 tested the capacity of the newly founded Private Bank of Copenhagen, and clearly demonstrated that Danish trade was now being built up along sounder economic lines than formerly.

But perhaps the most important of the contributory factors to this commercial revival was the removal of the toll on shipping passing through the Sound separating Denmark from Sweden. The history of this imposition is interesting. It was first levied in 1425, and many vessels, in order to escape the duty, passed from the North Sea to the Baltic through the Belts. It had, however, developed into a very profitable source of income for the Treasury, latterly bringing in as much as a quarter of a million pounds annually. Other countries had often protested without avail against this imposition, and for several hundred years the Danes were able to retain it. In 1855, however, the United States ambassador took the bull boldly by the horns and flatly informed the Danish Ministry that American shipowners would not be

prepared to submit to the levy after 1857, and that in their refusal to pay they had the cordial support of the United States Government. The Danes then wisely decided to call a general conference on the matter, to which all the Powers interested were invited. The result was that the States concerned agreed to pay Denmark an indemnity of £4,000,000 on the understanding that the imposition was formally and permanently withdrawn. Of this sum England contributed more than £1,000,000, the proportions being decided according to the respective tonnages of shipping which had passed through the Sound during the latest years of the existence of the toll. The interest on the indemnity did not amount to the sum of the annual levies, but there can be little doubt that what the Treasury lost the merchants of Copenhagen more than gained. For from that moment the commercial supremacy of the capital in these Northern waters has been assured. Vessels no longer avoid the Sound, and the Danes now recognise that the American ambassador, in compelling them to sweep this relic of mediævalism into the limbo of the past, provided their expanding trade with an impetus from which it has never looked back. After 1864, therefore, when the great trade boom came, Danish industry, shipping and commerce were all fully prepared to take their share.

In a slight review of such an extensive subject it is impossible to trace all the causes which have

contributed to the widening of the commercial field. Practically all the most significant developments began in the years immediately following the conclusion of the German war. The total capital of limited liability companies in Denmark at the present moment exceeds £50,000,000. From 1875 to 1895 these newly established concerns were slowly consolidating their position, but not much enlargement was attempted, the impetus being rather spent in the direction of social and agricultural betterment. This was the time when the great co-operative institutions sprang into being. Subsequent to 1895 there again ensued a remarkable and rapid growth in trade and industry, both in the promotion of new companies and in the extension of old ones.

Shipping concerns have always held an important and dominating position in the list of Danish commercial undertakings, a fact not to be wondered at when it is recollected that only seven out of the seventy-three towns of Denmark are not situated either by the open sea, or on some fjord leading to the sea. Less than 1 per cent. of the internal carrying trade of Denmark is done by foreign ships, while about 60 per cent. of the trade between Denmark and other countries is carried by Danish vessels. In addition, there exist several Danish companies whose ships do not come to Denmark at all, but ply between ports in other parts of the world. The routes between the Baltic and



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Fish Market and Fishing Boats in the Canal, Copenhagen.

the North Sea harbours are said by shipowners to be the most profitable in this direction, though there are no accurate statistics available to show the precise extent in which Denmark participates. Regular services between East Asiatic ports are also highly spoken of.

The mercantile vessels flying the Danish flag now number about 3,700, the total registered tonnage exceeding 500,000. Eighty per cent. of them are steamships. The headquarters of the majority of the companies owning these ships are in Copenhagen, the absolute supremacy of which city has been the outcome, as already explained, partly of the rescinding of the Öresund's toll, and partly of the opening of the Free Harbour in 1894.

In the spring of 1891 the Rigsdag passed the "Free Port Bill," and almost immediately the great undertaking was begun. The area on which the new harbour was to be constructed had first to be reclaimed from the sea. Extensive dams were built, the water was pumped clear, and the bed which the waves had washed over for centuries was laid bare. Over 1,094,000 cubic metres of earth had been removed by means of the powerful steam excavators specially designed and built for the work. On November 1st, 1893, Prince Valdemar, by simply pressing an electric button, opened the dams which separated the drained area from the sea, and the water rushed in and filled the docks. These latter are from 24 to

30 feet in depth, and have about 12,000 feet of quay frontage. About one year later the buildings, warehouses, and coal depôts had been finished, railway connections built, and the free port of Copenhagen, one of the finest in the world, opened to traffic. The cost of the whole undertaking was about £1,200,000. It is now controlled by a private company, with a capital of £250,000.

The geographical situation of the Free Harbour is excellent ; the comparative shallowness of the Baltic ports makes of it a natural transit place for the goods of the large Transatlantic steamers, while the distribution of goods is facilitated by the wonderful system of steamer ferries which connect the Danish capital with the other parts of the kingdom, with Norway and Sweden, and with Continental Europe.

More than 35,000 steamers and sailing vessels pass the watchmen on the custom-house pier in the course of a year, and of these about one-third are from England or British ports. Copenhagen is practically the only port in Denmark which receives international traffic, although Esbjerg, which is the outlet for the great export trade in butter, eggs, and dairy produce from Jutland, is growing in importance, and Marstal and Fanö are roadsteads for numerous sailing vessels.

The greatest shipping concern in Scandinavia is the United Steamship Company, founded in 1866,

with a capital of £1,500,000. It was promoted by that financial genius Herr G. F. Tietgen, who amalgamated several smaller companies with the object primarily of controlling the local Danish trade. Operations were later successfully extended to the Baltic, and they now cover the whole globe. This powerful concern maintains regular services between Europe and the principal ports of North and South America, the Levant, the Black Sea, and the Mediterranean. Its chief route is between Copenhagen and New York, and is served by the popular Scandinavian-American liners of from 9,000 to 13,000 tons. The export route from Esbjerg to Harwich is also run by this company, with the assistance of a generous State subsidy. The fleet of this line consists of 150 ships, with a total registered tonnage of 200,000. In 1912 it earned about £200,000, and paid its shareholders a dividend of 8 per cent.

The East Asiatic Company, Limited, is a combined shipping and trading business. It was founded in 1897, and, like the United Steamship Company, has a paid-up capital of nearly £1,500,000. It carries on trade in India, Siam, China, Japan, South Africa, South America, the West Indies, and the Pacific coast. It owns some twenty vessels, with a total tonnage of 75,000, and in addition hires steamers on contract. Moreover, this company is either interested in, or the proprietor of, several smaller concerns, the greatest of which

is the Siam Steam Navigation Company, possessing nine steamers. The East Asiatic Company were the first shipowners to send a motor liner to sea. Their offices are in Copenhagen, London, and Bangkok. In Siam the company owns and controls forests and mills, rubber and cocoanut plantations. One of its subsidiary concerns is the Mount Austin Rubber Estates, Limited, which possesses a capital of £450,000. A recent undertaking has been the importation of the soyn beans from Manchuria to Copenhagen and Stettin, where they are converted into oil-cakes in the company's own factories for subsequent use as fodder for cattle. The goods carried to the East consist for the most part of European manufactured articles, and more particularly of Danish cement. The company distributes a dividend of from 8 to 11 per cent. per annum. Its employees number upwards of 10,000. A great many of the shares are held in England, and are regularly quoted on the London and Paris exchanges.

There are some smaller shipping concerns, with capitals varying from £250,000 to £500,000. The Danish-Russian line is a well-managed and prosperous company belonging to this group. The C. K. Hansen firm is the largest owner of tramp steamers in Scandinavia, and one of the largest in the world.

Danish industry has always been handicapped by the smallness of the country and the utter lack

of coal and metals. There is, moreover, no abundance of labour, and wages are therefore comparatively high. In these circumstances the great factories and the congested industrial areas of England and Germany, France and Belgium, will never be found in Denmark. It is only when a Danish manufacturer selects some speciality and develops it to a high pitch of excellence, or to a degree of perfection which makes competition impossible, and particularly when he chooses a speciality which demands great technical skill and intelligence from the workman, that he can hope to enter the international market on terms with the manufacturers of the more favourably endowed countries. This economic limitation can be observed by a very cursory study of the character of successful Danish industrial undertakings. In the greatest of them all, for example, Messrs. Burmeister and Wain, the world-famous shipbuilding firm, their most pronounced success was obtained when they began to specialise in Diesel motors and motor-propelled vessels. This firm has a capital of £600,000, and regularly employs from 3,000 to 4,000 men in its yards and machine shops.

Among other concerns which have specialised in a similar manner are Messrs. F. L. Smith and Company, who are building cement factories all over the world with wonderful success. The excellent results attained by the great porcelain factories "Royal Danish" and Messrs. Bing and

Gröndahl afford a further illustration of the truth of this theory of specialisation.

There are few protected industries in Denmark. The duty on imports now amounts to about 6 per cent. of their value. Under this tariff certain trades have been specially nursed, mainly in articles destined for home consumption, *e.g.*, curtains and hardware.

The effect of the co-operative movement upon Danish trades has been described in an earlier chapter. It virtually dominates the agricultural group—dairy work, slaughter-houses, and the export of eggs. Some agricultural machines are made in Denmark, but the greater number are imported from the United States. One important industry however has remained outside the co-operative movement: the production of sugar from the sugar-beet. The Danish Sugar Factories were founded by Tietgen. They have a capital of £1,250,000, and enjoy a great protection under the tariff. The combine pays average dividends of from 15 to 25 per cent. per annum, but the gross profits are much greater than this figure, a large proportion accruing under former agreements to the beet cultivators, who sell their products to the company.

Among the remaining undertakings which fall within the scope of this chapter are the Great Northern Telegraph Company and the Copenhagen Telephone Company. The former was promoted

in 1869 by Tietgen. It owns and controls telegraph lines between Denmark and Norway and the British islands, and Russia. It is, moreover, the proprietor of several valuable monopolies in China and Japan. The head office is in Copenhagen, and its chief branches in London, Paris and Shanghai. Its capital is £1,500,000, and its annual dividends are from 18 to 25 per cent. It has accumulated reserves of about £3,000,000. During the financial crisis in the seventies many of the shares passed to Paris, but the administration of the company still remains in Danish hands, the Danish Government having the right to nominate a section of the board.

The Copenhagen Telephone Company has the monopoly for Copenhagen and Sealand. Its capital is £1,000,000. The Danish metropolis possesses more telephones in proportion to its population than any other city in the world except Stockholm. There are 53,000 subscribers, or one telephone to each ten inhabitants. The cost of installation and the rates charged for calls will appear to be extraordinarily cheap to an Englishman accustomed to the tariffs of his own country.

Gas, water, and electric light are in most cases provided by the municipalities, as are also trams and enterprises of a like nature. It therefore follows that but few private companies are formed for these purposes. The Danish Gas Company, with a capital of £500,000, however, is an important

exception. In towns where the municipality for some reason is unable to supply gas, a monopoly is granted to this company for a certain number of years, at the end of which period the gasworks revert to the authority which gave the contract. This concern pays 10 per cent. dividends, the shares being mostly in English hands.

The Danish Petrol Company has a capital of £250,000, distributes dividends up to as much as 50 per cent., and is largely controlled by the kindred Rockefeller interests. Mönsted Margarine, Limited, is a prosperous concern, with excellent foreign connections. Finally, the Danish Sulphuric Acid and Superphosphate Factory is of importance to agriculture. Its dividends often reach 40 per cent.

PART VI
GOVERNMENTAL

CHAPTER XXIV

ADMINISTRATION

The Ministries—Effect of Democracy in Denmark—Civil Government—The Municipalities—Local Government—Copenhagen—Legal Procedure—The Courts of Justice—Defects—The Rigsret—Defence Problems—Conscription—Military and Naval Administration—The Army in Peace and War—Diplomatic and Consular Services.

THE political administration of Denmark is carried on by a Cabinet consisting of the Prime Minister and nine other members, who are at the head respectively of the Foreign Office, the Home Office (with which are included the Post Office and the functions of the English Local Government Board), the Treasury (embracing also the colonial administration), and the Ministries for Church and Education, for Commerce and Shipping, for Public Works (including the State railways), for Agriculture, for Justice, and for National Defence.

Each Cabinet Minister receives a salary of £675 annually. The present Danish Ministry is one of the most democratic in Europe. It neither gives nor accepts titles. An interesting feature of Danish political life is the opportunity it affords for obscure individuals to attain positions

of great importance in the State. A village blacksmith has been Minister of Public Works; several small holders have been at the head of the Ministry for Agriculture; while both the late Prime Ministers—I. C. Christensen and Berntsen—were country schoolmasters before entering political life. The present Education Minister is a parish priest, while the daughter of one of the present Cabinet has worked as a domestic servant in London.

The democratic wave has brought many demagogues who should never have left their shops or farms to positions quite beyond their capacity, and where they have only proved lamentable failures. Those who have seen anything of Continental politics behind the scenes, or who understand the motives of much that is done, generally admit that the two greatest stains upon it are corruption and demagogy. Political life in England is not untarnished by these vices, but without boast we may claim loftier standards of political honour and morality than are to be found in any other country which possesses a parliamentary system, and it is for Englishmen to see that the great name and fine traditions remain unsullied. However, despite the defects which must be inseparably associated with a system in which politicians are professionals, we believe that Danish democracy has brought to light many statesmen of great initiative and astonishing ability who



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The City Hall of Copenhagen, from the Tivoli.

[Photo : Paul Hecksher]

would otherwise have remained without an opportunity of exercising their undoubted gifts.

For purposes of civil government Denmark is divided into the capital and eighteen shires or *amter*. Copenhagen is administered by a Royal Officer, a magistracy, and a general council. The Royal Officer is the President or Lord Mayor of the city ; the magistracy consists of four aldermen and four councillors, chosen by the General Council, which has fifty-five members. Elections to the General Council, as in all municipal elections in Denmark, are on a system of proportional representation, each party being allotted a number of seats in proportion to the poll it has obtained. Women have possessed votes to this body since 1908, but as a general rule there are only one or two lady members to each council in the country. Trams, and water, gas and electricity works, and several hospitals belong to and are controlled by each municipality.

In Copenhagen the Chairman of the General Council has not the same power as in the country, where he is also mayor, and often at the same time magistrate and chief of police. As in England, the *amter* are controlled by county councils, while there are almost identical distinctions, as between towns and municipalities, boroughs, urban and rural district councils, and parishes. These complications of local government are beyond the scope of the present work. Speaking generally,

the local authorities have the same powers as in England, somewhat extended in certain directions. Only in such matters as the taking up of a new loan is the sanction of the Home Secretary necessary.

The members of county councils are elected in a somewhat complicated manner, the system being similar to that applied to the elections for the Landsting. The municipalities of Copenhagen and the provincial towns, however, are elected by those who are rated on an income of at least 400 kroner (£22). Aldermen and sheriffs are in most cases appointed by the Crown, except at Copenhagen, where they are elected by the General Council, subject to royal approval. The financial position of Danish municipalities is, on the whole, exceptionally good. The ordinary Budget of Copenhagen amounts to about £1,100,000 annually.

Legal procedure in Denmark affords many curious contrasts to our own system. In the first place, a Danish judge does not fill the same position in society or occupy the place in the public mind as do the judges in England. In many instances his position is combined with other offices, and he is not therefore primarily thought of as Mr. Justice Jensen, but as Herr Jensen, a State officer and judge. The greatest salary received by any Danish justice is £500 per annum.

There are three courts : the Common, the Upper, and the Supreme. Each civil case is first sent to a

small committee, whose object is to attempt to settle the dispute by consent. Failing this, recourse is had to one of the Common Courts, of which there is one in every town. Procedure is extremely slow, as there is no pleading, and all the evidence has to be laboriously examined in writing. An appeal from the decision of a Common Court judge is made first to one of the Upper Courts, of which there are only two, one in Copenhagen and one at Viborg, and finally to the Supreme Court, which consists of thirteen members, and is the only law court in Denmark except a special court for commercial and maritime cases where pleading takes place.

The apparently grave defects of Danish criminal procedure are that judge and police officer are often the same person, who has therefore to collect the evidence against the prisoner and to sentence him, and that an advocate is denied to the accused during the preliminary stages of examination. It is hoped that a general reform of the legal system will shortly be carried into effect. Civil cases will be taken with greater dispatch, and a separation between judicial and police functions will be instituted. Juries will be used in the great majority of cases, oratorical pleading will become general, and the accused will be permitted an advocate from the beginning of the case. That these much-needed reforms have not been carried through earlier may be ascribed to the fact that any change

would prove expensive. Moreover, it should be remembered that although the evils of such a system in a large State would be very considerable indeed, in a country so small as Denmark, where the distance between judge and public is not so marked, and where any abuse of the system cannot take place without being instantly discovered, they are so minimised as to be almost negligible.

In addition to the general courts, Denmark has a specially constituted political court called the Rigsret, or Realms Court, whose functions are to try and punish members of the Cabinet who have been impeached either by the King or by a vote in the Folketing. This court consists of the members of the Supreme Court acting together with an equal number of distinguished men chosen by the Landsting. The Rigsret has only been used on three occasions during the sixty-six years that it has been in existence.

Since the war of 1864 the defence of the country, and more particularly that of the capital, has been one of the principal points of contention in Danish politics. Parties have come into and gone out of office solely on this question. In an earlier chapter we have shown how Estrup, the Conservative statesman of the seventies and eighties, succeeded in the face of tremendous opposition in fortifying Copenhagen both by land and sea. Since the domination of the Liberal and Radical parties the system of defence has been completely reorganised,



principally by a reform carried through in 1909. The sea fortifications of Copenhagen were then strengthened considerably, and it was decided to abolish the land forts in 1922, unless the Rigsdag at that time decided otherwise. The troops have latterly been concentrated in Sealand, where thirty-six out of the fifty-two infantry regiments of the Danish Army are now stationed. The remaining sixteen regiments are distributed in Jutland and Fyen.

The conscription of Denmark is mild when compared with that of Germany, Austria, or France. All Danes at the age of twenty are medically examined as to general suitability for military service, and as only 11,000 conscripts are desired annually, it follows that a large proportion of the male population escapes, only the very fittest indeed being accepted. The length of service varies, but the average works out at less than twelve months, some arms requiring two years, others only four months. Payment of about 1s. per diem is made to all conscripts who do not receive full board at the barracks; to those who obtain everything the daily rate is proportionately reduced. At the conclusion of the period of service a conscript remains in the army lists for sixteen years, and during this time is, of course, liable for war service.

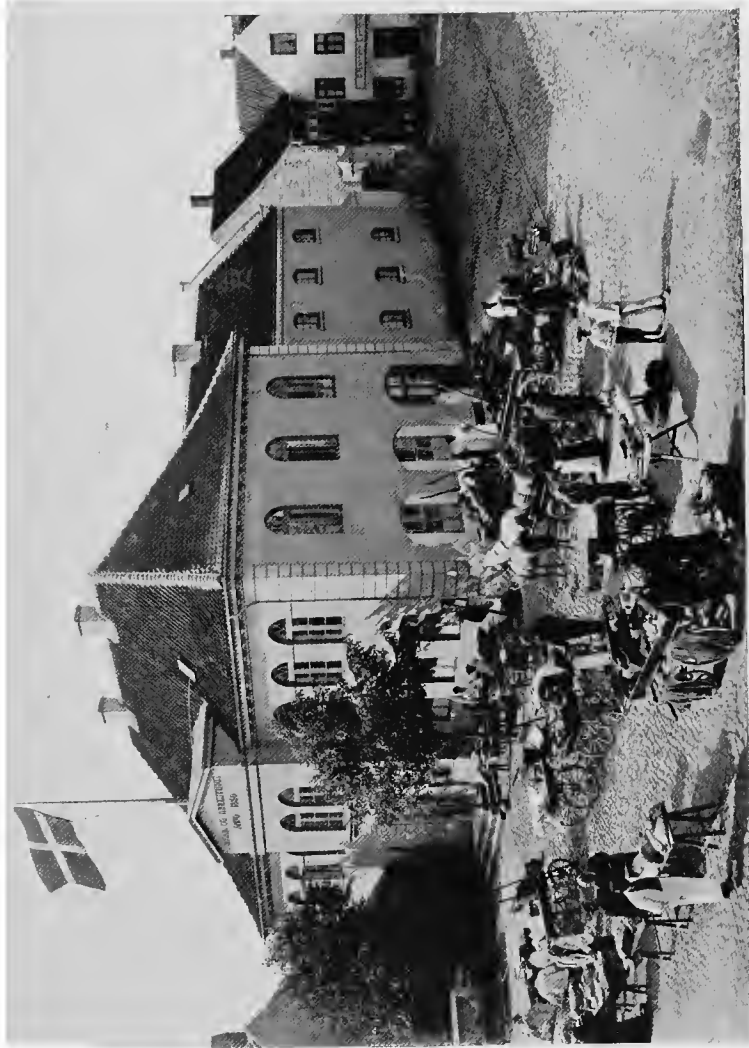
Both military and naval administration are carried on by the Minister for Defence. Formerly,

in Conservative Cabinets there were two Ministers, respectively officers of the army and navy. Now however these are combined, and the Minister is generally a civilian, who has the assistance of an advisory board composed of officers from both services.

On the active list are a life guard battalion and ten infantry regiments of three battalions each, five cavalry regiments of three squadrons each, twelve field batteries, three battalions of fortress artillery, and six companies of engineers. The permanent peace strength is about 13,500 officers and men, and the annual contingent of special reservists—who are men trained for short periods only—is approximately 17,000. The field army on a war footing, without depôt or garrison troops and reservists, would be about 50,000, though by calling up all the reserves, about 125,000 men could be mustered.

The army is divided into two commands, the Sealand Command and the Western Command, each with a General Commanding Officer. The navy consists of six small battleships, four coast defence ships of about 4,000 tons each, twenty-four torpedo boats and destroyers, five or six submarines and five protected cruisers. Most of the vessels are antiquated.

Denmark maintains diplomatic services in England, Germany, Russia, Norway, Sweden, China, and the United States. There is a combined



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Körös City Hall : a typical Provincial Town Hall.

[Photo: Karl Jørgensen, Körsör.]



embassy in Paris for France and Spain ; in Vienna for Austria and Italy ; and in Brussels for Belgium and Holland.

To these has recently been added an embassy at Peking, where Danish interests had formerly been in charge of the Russian Ambassador. As, however, Danish companies have acquired extensive interests in the Far East, the desire for a special embassy became stronger. In the same manner Denmark has, since the last Balkan war, appointed a Minister at Constantinople. Consular services are maintained in all the principal ports and commercial centres.

CHAPTER XXV

SOCIAL LAWS

General Conditions—The Workmen's Protection Act, 1913
—Holidays—Early Closing of Shops—Women in
Factories—Child Labour—Dangerous Trades—Old
Age Pensions—Longevity in Denmark—Hospitals
—Treatment of Epidemic and Tuberculous
Cases—Consumption — Sanatoria — Sick Clubs —
Accident Insurance — Fishermen and the State
Insurance Board — Unemployment — " Periodical
Workers "—Trade Unions—Labour Clubs—Labour
Exchanges—The State in its Relation to Children
—Illegitimacy — Foster Houses — Parish Relief—
" Help " Societies.

IN its relations with the weakest and most unprotected section of the community, in its labour and poor law administration, Denmark has, during the past thirty years, been working out a code of social law unsurpassed in Europe, both for its practicability and its broad humanity. It is true that in Denmark the statesman is not faced by the grave industrial problems of many of the larger States. It is a country of farming and commerce, not of factories and mines, or of those vast areas of industrial workers such as we have in England. Moreover, the body of the Danish people is largely composed of those for whom it is not an impossible thing that they may some day

require the assistance of the community, although not for the moment in want. It therefore follows that the Dane is inclined to support "self-contributory" schemes with a greater readiness than he would show were it quite certain that he himself would never receive any benefit from them.

Denmark has had for twenty-five years reforms for which many of the more powerful States are still waiting—absolute protection of workmen against long hours and unhealthy or unsuitable conditions; pensions to old people; State sick benefits and insurance, both against accidents and unemployment; provision for destitute and natural children; and State aid for widows.

The Workmen's Protection Act, 1913, which is applicable to all trades and to any industrial undertaking which employs other motive power than wind and water, insists upon a certain cubic quantity of air for each indoor worker, a minimum height for each room, proper conditions as to both natural and artificial light, the necessary conveniences for eating and washing, the provision of wardrobes, and most stringent precautions against fire. The rooms are required to be cleaned daily, and the system of ventilation in any building used for industrial purposes must be upon an approved plan. The Act enforces special restrictions as to the employment of machine men,

lift attendants, and work involving an element of danger, however small. All boilers are annually inspected by the factory supervisor, and it is forbidden to allow any man to attend a large boiler unless he has first acquired a certificate from certain specified engineering bodies stating that he possesses the necessary knowledge, and is a fit and proper person to perform such a duty.

The number of holidays in the year, including Sunday, is sixty-one and a half, and upon these days no employer can demand the attendance of his workmen, except in certain necessary instances, or where special arrangements have been made with the sanction of the Home Secretary. Danish workmen put in, on an average, 9·8 hours per diem (all trades), as against 11·4 hours thirty-five years ago. The position of shop workers is not so satisfactory, but the movement for shorter hours is now extending so as to embrace these long-suffering members of the community. The Act provides that all shops shall close at 8 o'clock in the evening, and furnishes the municipal and local authorities with power to close them at 7 o'clock when and where deemed necessary.

Women are not permitted to work in factories for a period of one month after childbirth without special certificates from a doctor. During this period of enforced inaction State aid is given when



To face p. 310.]

The King of Denmark watching Boy and Girl Scouts doing Red Cross Work.

desired, and is specifically regarded as "not in the nature of parish relief."

Children under fourteen may not be employed in factories. Young people between the ages of fourteen and eighteen cannot be employed for more than ten hours a day, and not in any circumstances between 8 o'clock in the evening and 6 o'clock in the morning. Factory workers between these ages must be allowed two definite rest periods during their working day. The inspector of factories may, and often does, determine that the work in a certain factory contains such elements of danger to life or health that it is unsuitable for women and young people, and in such cases these latter are prohibited from working in the factories in question so long as the danger can be shown to exist.

Old age pensions were first introduced in Denmark in the year 1891. The Act provides a pension at the age of sixty to all who are unable to support themselves or those dependent upon them. The conditions are: (1) birth in Denmark or naturalisation; (2) continued residence in the country for the preceding ten years; (3) no convictions for criminal offences; and (4) no receipt of parish relief during the five years immediately preceding the "pension age," unless such has been repaid.

The pensions are not fixed, but depend upon the

necessities of each individual case. The municipality and the State each contribute one-half. The proportion of the population of Denmark which is supported in this manner is 24 per cent. of the people of the necessary age, or 37 per cent. of the male population and 21 per cent. of the female section of the community. The pensions average £11 per annum. A pensioner is permitted to reside where he desires, and it is often the case that persons in receipt of old-age pensions will elect to live in one of the towns rather than in the country, the reason being that in the towns the pensions are slightly higher than elsewhere. In such instances the municipality of residence is entitled to claim three-quarters of its half of the support from the municipality of birth.

In certain quarters it has long been felt that this Act is not the best that could be devised, inasmuch as no inducement is given to thrift. There have been many instances of persons accumulating money and spending it between the ages of fifty and sixty in order to qualify for an old-age pension. Moreover, examples of deliberate evasion have been brought to light, in which a man has made over his property and investments to his family, and thus secured for himself the full old-age relief. It is believed that a new Act will shortly be forthcoming, based upon a self-contributory scheme, providing a popular insurance against destitution in old age, and making it possible for every

Danish citizen at a fixed age to receive an income from the State.

Denmark is a country where longevity is most marked. The Scandinavians generally are a long-lived people, and as, for the most part, they work under healthy conditions, it becomes comparatively easy to frame laws for the provision of help in sickness.

There are, of course, many private nursing institutions and hospitals in Denmark, but the care of sick people is largely relegated to the municipalities and counties (*Amter*), who own and control most of the great hospitals in the country. The magnificent National Hospital in Copenhagen, however, belongs to the State. It is one of the finest in Europe, both in equipment and methods. The hospital contains 1,200 beds, and its administration is almost entirely in the hands of the authorities of the Copenhagen University, whose professors form its governing body, and provide it with its staff of doctors. The medical students at the University obtain the practical part of their training here.

In its treatment of epidemic and tuberculous cases the Danish State is notably generous. Tuberculosis is the scourge of Denmark. Something like one-eighth of the people die from its ravages. In 1901 a national crusade was commenced against this terrible disease, and a society was founded whose sole object consists in fighting

consumption from its first incipient stages to its fatal end, with all the means at the disposal of modern science. The society is supported generously by the State, and, as may be imagined in the special circumstances, also by the mass of the people. Indeed, so great has been the loyal and earnest co-operation of the populace with the Government in this matter, that in the short space of ten years so many first-class sanatoria have been equipped that it is now possible for every tuberculous sufferer to receive the most modern treatment either gratuitously, or for the payment of fees in accordance with his means. Sick clubs are of great assistance in this respect, but the State often bears as much as three-quarters of a patient's expenses, and in addition supports his family during his isolation in the sanatorium.

When new sanatoria are erected the Government deposits £90 for each bed. The National Society for the Prevention of Tuberculosis also assists poor families into better dwellings, and often procures for afflicted persons employment of a more suitable character.

Sick clubs are very popular in Denmark. More than one-quarter of the inhabitants belong to such institutions. The membership of each club varies between 100 and 1,000, while four of them have each more than 10,000 members. The total number of subscribers increases by about 40,000

per annum. To obtain State aid a sick club must show a minimum of fifty members, must restrict its operations to a certain parish or town, and must consist of only working-class members. The Government support to the club amounts to 2s. 3*d.* a year for each member on the roll, and 1s. 5*d.* per annum towards the fees of each member. In addition, a subscriber to a sick club is admitted into the State hospitals at half charges. The support which the sick club gives to its members consists of free doctoring, nursing and treatment at the hospitals, and a cash grant which must not exceed two-thirds of the sufferer's average earnings, with a fixed minimum of 6*d.* per diem. This assistance is usually rendered during a period of thirteen weeks, but some clubs extend the period to twenty-six weeks. The contributions payable by the members are statutorily fixed at 16s. per annum in Copenhagen, 11s. per annum in the smaller towns, and 5s. per annum in the country. A person may not join a sick club after the age of forty, but transfers from one club to another are sometimes made after that age, provided both the clubs in question are themselves members of the Central Union, which arranges the re-insurance for the clubs. Finally, persons in the enjoyment of incomes exceeding £100 a year are ineligible for membership of a sick club.

So far as accident insurance is concerned, Den-

mark is one of the safest countries in Europe in which to live. Only 230 persons per annum out of each million in Denmark are killed in accidents. The proportion in England is more than twice this figure. The low Danish rate may be accounted for by the absence of mines, rocks, and mountains. Most of the accidental deaths in Denmark arise from drowning.

Insurance against accidents is largely effected through private companies as in England, though the State also participates in this business. In 1898 an Act was passed compelling the employer, in the event of accident sustained while in his employ, to pay to the workman : (*a*) a sum of three-fifths of his average earnings during the first thirteen weeks following the cessation of support from his sick club ; (*b*) in cases of absolute invalidity, six times the annual income in one sum ; (*c*) in case of death, to the persons dependent upon the deceased a sum equal to four times the annual income. In practice it is found that most employers transfer these liabilities to the insurance companies. All disputes on questions of accident insurance are settled by a special court, which decides whether the employer's liability shall be paid immediately in cash or converted into an annuity during the life of the workman.

The farmers do a very large part of their insurance themselves on a co-operative basis. Fisher-

men are subject to a special State Insurance Board, to which they are each required to pay 6s. a year. In sickness they receive 1s. 8d. a day ; in invalidity a sum of £200 down ; in case of death, £140 is paid to the relatives. Sailors in the mercantile marine receive similar benefits, while in the case of foreigners who meet with death while serving on Danish ships the £140 is also paid to the dependents when the deceased person is a member of a nation which in similar circumstances would treat a Dane as a native.

The latest figures show that there is more unemployment in Denmark than in most of the other European countries, but that, on the other hand, there is a much better organisation for dealing with it. The average number of unemployed in the winter is 10 per cent. of the labouring population. This may be largely accounted for by the fact that several hand workers depend for their living upon climatic conditions, and should rather be termed "periodical workers" than "unemployed," especially as during their terms of employment they earn much higher figures than the regular worker.

The trade unions of Denmark stand in an exceptionally strong position, and to this may be in part attributed the fact that although there is more periodic unemployment, there is infinitely less destitution or suffering than in other countries, with apparently lower figures of unemployment.

In 1907 the State took over the control of the labour clubs, which are institutions for supporting unemployed workmen, quite apart from the trades unions, the sick clubs, etc. It is compulsory to restrict the operations of the labour clubs to one trade, or to one town, while they must be open to all comers, whether members of trade unions or non-unionists. They must have no other object than that for which they are designed, and must keep their work strictly separate from that of any other similar institution, particularly the trades unions. The assistance from public funds which these clubs receive is as follows: The municipality in which the club is domiciled is entitled to donate an amount equal to one-third of the members' fees, in which case the Treasury will add a sum equal to one-half of the income of the club (*i.e.*, the fees of the members plus the municipal donation), so that the total grant from public funds will be the same as the members' fees, provided, of course, that the municipality gives the maximum amount it is permitted to give, which in 88 per cent. of cases it does.

The members of a labour club receive during unemployment between 7*d.* and 2*s.* 3*d.* a day, but the support must not exceed two-thirds of the average wage a worker in that trade and locality would receive. No grant is made for the first two weeks of unemployment, and in no case in which

the sufferer has not been a member for a period of one year. Neither is relief obtainable during strikes or lock-outs, or where the unemployment is the fault of the workman, or when a member declines work offered him by the club. In legitimate cases support is granted for ten weeks. The members of these institutions exceed 100,000 in number, while the fees average out at about 14s. per annum.

Labour exchanges have been worked successfully in Denmark for ten years. The exchange in Copenhagen finds employment for 40,000 workers every year.

The State in its relation to children has always been an important point of agitation in Danish politics, and a vast body of laws relating to the child testify to the care and thought which have been bestowed upon this important subject.

There are an extraordinary number of natural children in Denmark, due to conditions which have been emphasised in another chapter. Towards the support of an illegitimate child the father must contribute a monthly amount determined according to the circumstances of the mother. He has no right of control over the child. Should he desert the mother, or fail in his obligation to pay the maintenance, he is, as in England, summoned before the magistrate and compelled to fulfil arrears, and to guarantee future payments. If the father dies,

or it becomes otherwise impossible to obtain the monthly contributions from him, the mother applies to the municipality, which then grants what is called "normal foster-house support," an income of between £4 and £8 a year, being about three-fifths of the normal annual cost of a child in a good foster-house. This is regarded as "parish relief" to the father but not to the mother.

Married parents are compelled by Danish law to support their offspring until the age of eighteen years.

The maintenance of the children of necessitous widows is arranged for upon a sliding scale. The conditions are that the widow's fortune is less than £225, and that her annual income does not exceed two-thirds of the amount which is exempted from income tax (*viz.*, £45, with an allowance of £5 for each child under the age of fifteen years). The support consists of an annual grant of £5 10s. for each child under two years; £4 8s. for each child between two and twelve years; and £3 6s. for each child between twelve and fourteen years.

Foster houses are under the supervision of the police. A special State board undertakes the care of natural children, orphans, and the children of criminal or notoriously bad parents. Children may be separated from parents in certain well-defined cases, where it is deemed that the parents

would have a deteriorating effect upon the children, or where continued neglect can be proved against both parents. The expenses of child maintenance in all the instances mentioned are divided between the Treasury and the municipalities.

Parish relief in Denmark has been reduced to a minimum. Its receipt debars the recipient from an old age pension, disqualifies him from admittance to membership of unemployment clubs and institutions of a similar character, and, if unmarried, prevents him from marrying without special permission for a period of five years after its receipt. About 4 per cent. of the population receive intermittent relief of this kind. The workhouses in the country are for the most part old and bad, with the exception of those in the capital and some in the larger towns.

To avoid the stigma of pauperism, there are many help societies, which grant aid on somewhat similar lines to that given by the parishes. The income of these societies is obtained partly from the licences on dogs and partly from certain funds at the disposal of the municipalities. The help given must not exceed £10 in eighteen months.

Denmark is not yet an Utopia, and Danish statesmen have not been invariably successful in their plans for social amelioration, but it may be claimed for them, without any undue par-

tisanship, that, whatever else they have done, they have at least faced their problems courageously and attempted a solution, while many other countries are still disputing over the nature of the difficulties.

CHAPTER XXVI

DENMARK'S OVERSEAS POSSESSIONS

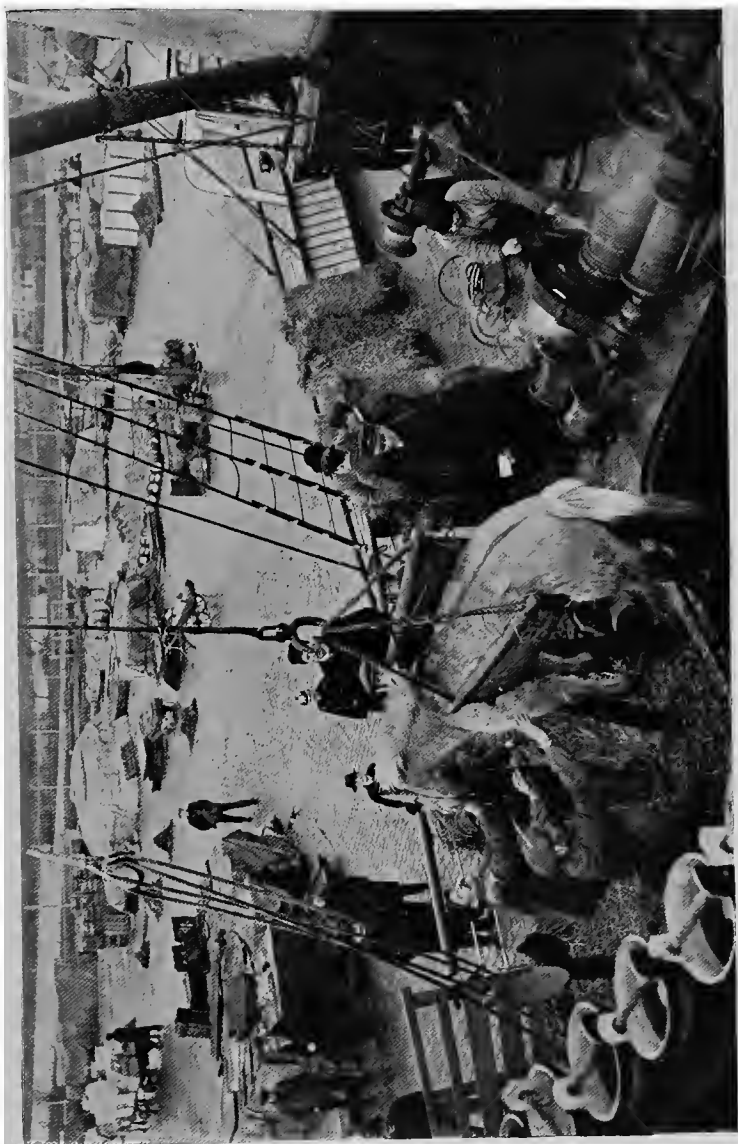
The Farøe Islands—Physical Characteristics—Inhabitants: their Customs and Occupations—Language, Education, and Temperament—Fauna—Iceland—Conformation—Volcanoes and Geysers—Reykjavik—Commerce—Communication—The Iceland Ponies—The Tingwalla—Tourist Possibilities—Greenland—The Esquimaux—The Danish West Indies—The Future of Denmark.

WITH one exception the overseas possessions of Denmark are of little commercial or political importance. They consist of Iceland, Greenland, the Farøe islands, and the Danish West Indies. Of these the Farøes, strictly speaking, form a part of Denmark itself, being represented at Copenhagen in the Landsting by one member and in the Folketing by one member. They are a group of about twenty islands, seventeen of which are inhabited, situated in the North Atlantic, west of the Shetlands, occupying an area of 400 square miles, and supporting a population of 18,000 people. The principal town, which is situated on Strömøe, or Stream Isle, is Thorshavn, with less than 6,000 inhabitants, but the wealthiest village is Thrangisvaag, the capital of Suderøe (South Isle). These islands are extremely small, and

the channels between them often difficult to navigate. Their soil is poor, and their vegetation scanty. The people live mainly by fishing, supplemented by sheep farming on a small scale, the collection of birds' eggs, and occasional whaling. The climate is milder than might be expected from their Northern latitude, owing to the fact that they lie near the course of one of the currents of the Gulf Stream. The islands were first populated by fugitives from Norway in the ninth century. In the middle ages communication with the outside world was very rare, and therefore to this day the islanders still retain many of their ancient and picturesque customs and costumes. For administrative and ecclesiastical purposes they are included in the diocese of Sealand.

Local affairs are controlled by an assembly called the Lagting, whose chairman is an *Amtmand*, appointed by the King of Denmark. This island council only sits for about two months in the summer, and its members are paid out of the proceeds of a poll-tax levied on all the voters in the islands. There are no bye-elections, each deputy having an assistant chosen to take his place in the event of his retirement or death. Taxes are collected by sheriffs, who are invariably Farøe men.

There are no lawyers on the islands with the exception of those at Thorshavn, where all important cases are tried. Smaller cases are left to the



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discretion of the headman of each village, or for the sheriffs on their quarterly rounds, the final appeal in all instances being to the Danish courts. Crimes, however, are said to be extraordinarily rare, the Farøe islander being temperamentally peaceable and law-abiding. The greater number of offenders who find their way into the only two prisons on the islands are stated to be fishermen from the Shetlands. Mr. Nelson Annandale, the well-known ethnologist and traveller, has discovered a rather curious custom still in vogue in the Farøes. As the law only permits a prisoner to be given bread and water, and as this is hardly a generous diet in a Northern climate, an arrangement is made whereby a man who is detained for more than a few days serves his term in periods of three days, enjoying three days' freedom between each, so that his punishment is spread out over twice the estimated period. Under ordinary circumstances there is no danger of his escape during the periods of respite, and should a ship come in while he happens to be free, he can easily be clapped into gaol again until it sails. Long sentences are, of course, served in Denmark.

In Thorshavn there is a small college for teachers, and in some of the larger villages there exist elementary schools, the instruction being given in Danish, but the education is mostly of a patriarchal character and received in the homes.

The results of this system are not altogether unsatisfactory, the peasants being naturally intelligent and gifted with great common sense. They are a strong and unusually handsome race, well proportioned, dignified, fearless, sober and very hospitable. Springing from a stock half Viking half Scottish, they make excellent sailors and fishermen. They are honest, sane, clean in home and person, and by many are considered to be the finest living representatives of the heroes of the ancient sagas.

The Farish dialect is a corruption of the classical Norse of the ninth and tenth centuries and when written resembles modern Icelandic although in pronunciation the two languages differ materially. The weekly and fortnightly newspapers which emanate from the presses at Thorshavn, however, are for the most part printed in Danish, which is read and understood by nearly everybody on the islands, being the language of the churches, the schools, the Lagting and the law.

The Farøe houses are picturesquely constructed of wood, roofed with birch-bark, and painted with tar in precisely the same style and manner as in Norway more than a thousand years ago. Solitary farmsteads are rare. In the capital the appearance of the irregular, narrow streets and stairways, the faded brown and grey wooden houses, and the primitive oil-lamps, give the place a curiously old

world aspect that is very enchanting until one "stumbles in the dark down some steep flight of steps, or one of the very many precipitous openings on the sea."

Nearly every Farøe man owns the land he occupies, which is cheap though almost unproductive; but he is obliged to wring the major portion of his living from the sea. Fortunately the waters round the islands contain enough fish to ensure, if not an excess, at any rate a sufficiency, of food for himself and for those dependent upon him. Whaling and fowling are the chief occupations, providing the islanders with food for the winter, oil for their lamps, floats for their nets, and toys for their children. The chief whale followed is the "pilot"—*Globicephalus melas*—while of birds the islands team with puffins, fulmar petrels, gannet, guillemots, razorbills and shear-waters. It is said also that the great halibut grows fatter on the Farøe bank than anywhere else in European waters.

More important than this group of islands—indeed, the most important of all the Danish possessions—is Iceland, with her 85,000 inhabitants, her own parliament, and her national flag, the land which is incomparable in the prodigality of wild beauty with which nature has endowed her. Her glaciers are the largest in Europe, while her hot springs and geysers, her tablelands of volcanic cinders, her lava fields, her forests of dwarf trees,

her long and silent valleys, form an *ensemble* as unique as it is picturesque.

Like the Faröes, Iceland was originally colonised by the Norwegians, but at the separation of 1814 it remained under the Danish crown. The area of the country is estimated at 40,500 square miles, and it is not unlikely that its commercial expansion will prove extremely important to Denmark. It is said to be the most volcanic island in the world, though there has not been much loss of life, largely owing to the fact that Hecla, the chief volcanic peak, is situated in the remote and almost inaccessible interior of the country. Peculiar features of the island are the warm geysers, which sometimes reach thirty or forty yards in height. In former times these phenomena occurred two or three times daily with great regularity ; now, however, the springs are inactive on occasions for several days at a time.

The high plateaux of the centre of the island are frequently snow- and ice- bound, but the lowlands of the coast enjoy a healthy and equable climate, with no extreme severity either of winter or summer. The majority of the commercial companies operating in Iceland are Danish or English, the chief articles of export being the famous Iceland ponies, wool and mutton, cod, eiderdown, and blubber. Although in former times the island appears to have had an exceptionally high rate of mortality, this has diminished considerably in

recent years, and the number of inhabitants is now steadily on the increase.

The capital of the country is Reykjavik, with a population now approaching 13,000 souls. Despite its proximity to the Arctic circle, this town is not by any means the primitive settlement many English people believe it to be. There are two biograph theatres open throughout the year, and in addition a winter theatre. Two newspapers are published, the most important being the *Isafold*, which is issued twice weekly. There is the parliament house, the cathedral, and in addition two other churches, one Protestant and one Catholic. The Bank, the Library, and the Old Icelandic Museum are fine modern buildings. There are at present, however, no trams and no electric light. Two years ago a gas company commenced operations. The water supply is obtained from a large waterfall some eight miles distant from the town. There are two good hotels, and weekly communication between Leith, the Faröes and Copenhagen is maintained by two Danish shipping companies. Both in summer and winter steamers connect with the principal coast towns and Reykjavik, and with the little southerly island of Vestmanöe. There is a large Latin school, with scholarships leading to the Copenhagen University, of which mention has been made in an earlier chapter. In this connection it may be observed that students from Iceland receive a maintenance

grant of some sixty kroner a month during the three or four years they are at the University. On an average there are twenty or thirty Icelandic students in Copenhagen every year.

Communication in Iceland is effected almost entirely by means of the wiry little national ponies. There are no railways. The roads connecting the principal points of the island are moderately good, though in the winter they often become impassable. With the exception of the capital and Akureyri, there are no important towns, but there are some three or four fairly large communities, the chief of which are Isafjord and Seydisfjord. One of the villages boasts electric light in every house. This is Havnefjord, a diminutive city near Reykjavik, and the only place in Iceland possessing a dynamo. The motive power is supplied by a waterfall.

It has been cleverly shown by Mr. Annandale, to whom reference has already been made, that Icelandic life cannot be perfectly comprehended until one has grasped the part which the small wiry ponies play in it. "Everybody in the country rides. To walk is considered to be deficient in personal dignity; to pay a call on foot in the country, or even to dismount uninvited at a farmhouse door, is looked upon as a breach of good manners. The very beggars are men who, through laziness or misfortune, are unable to produce sufficient on their own farms to support their families, and who ride round to their neighbours

with a large bag, in which they receive broken meats and cast-off clothing. Without the ponies it would be impossible for the lowest savage to exist in Iceland, except directly on the coast, for without food from the sea, if not from abroad, there would be nothing to eat. Every luxury, every article above the necessities of primitive man, every plank of wood, every piece of metal, every pound of corn, must come from the outside. The food supply of the whole population is entirely dependent on the ponies, which carry in the hay, transport the wool to the coast, and bring fish to the farms which are not near the sea. Indifferent as to their track, sure-footed as goats, they trot along through marshes, over mountains, across rivers, in single file, sometimes herded by a dog, sometimes tied tail to head, often almost hidden by their loads. Given time and numbers, they will carry anything from a man to the wood and metal for a house. During the summer the cost of keeping one of these useful animals is only about a farthing a day."

The Icelandic tongue is akin to old Norwegian, and the characteristics and tendencies of the people are not dissimilar to those of their ancient forbears. They are proud, independent, sceptical, extraordinarily self-reliant, and patriotic almost to the point of Chauvinism. In some respects they may be said to have retained much of the traditional temperament of the splendid old Vikings

who preceded them, but they are neither so clean nor so lovable as the Farøe islanders. One remarkable fact must not be omitted. In a few years it will be quite impossible to obtain alcoholic drinks on the island. Already it is forbidden to import them, and when the existing stock has become exhausted no more will be supplied, except for medicinal purposes. The chief food of the Icelanders consists of fish, mutton and fowls. Vegetables are imported from Scotland and some oxen from Denmark.

Perhaps the most celebrated tourist resort on the island is the Tingwalla, a wild ravine about thirty miles north of Reykjavik. Its attractions are an immense earthquake crack in the mountains, two beautiful lakes, and some warm springs from which the steam rises, often shrouding the sides of the mountains. Iceland is being rapidly opened out from the tourist standpoint, and there appears to be no reason why in the future it should not become one of the favourite countries for travellers, a Northern Switzerland. But the alcoholic prohibition would have to be removed if any money is to be attracted to the country. Two great German liners make the round trip every summer, from Hamburg to Reykjavik, Akureyri, Spitzbergen, the North Cape, Christiania and back to Hamburg again.

In addition to the Farøes and Iceland, the Danes number among their overseas dominions that vast,

inhospitable, ice-bound country, Greenland. Out of an estimated population of some 14,000 souls only about 400 are Europeans. Greenland is a great expense to Denmark, the country only being inhabitable for a short distance inland. Nevertheless missionaries and doctors are maintained there in an almost vain effort to preserve the Esquimaux from extinction. The trade of the country is the monopoly of the Royal Greenland Trading Company. The chief product is kryolith, a substance used in the manufacture of soda.

The Danish West Indies consist of three small islands—St. Croix, St. Thomas and St. John—whose united area is but 142 square miles. The population, which at present numbers 27,000, is slowly decreasing. Although a new harbour has been built at St. Thomas, the islands as a whole yield no return to their possessors, and require a certain grant from the Danish Budget annually. Upon several occasions a sale to the United States has been proposed, but never carried into effect.

One meets with a multitude of strange speculations as to the future of Denmark. A State once dominant and powerful, now sunk politically to perhaps the lowest ebb in its history, has yet during the last fifty years passed through an agricultural, industrial and social awakening which has compelled the admiration of Europe. The Danes have no outstanding diplomatic or political gifts, but

they compensate for the lack of these by a business shrewdness, a sound common sense, and a power of steadily applying themselves to their own betterment materially and intellectually. Notwithstanding these gifts, there are many who believe that the future of this race, so near to our own both in blood and in capacity, will be a dark and troubled one. Speaking generally, it may be said that the middle and upper classes are decidedly pro-English in their sympathies, while the members of the trade unions were at one time more influenced by German labourers. The organisation of the Socialistic party and the trade unions was originally copied from Germany, but it seems as if English and American institutions have during the last few years become better known to the Danish labourer and gained his sympathy for these countries.

There are not lacking those who prophesy that within fifty years Iceland will have been lost to England, Greenland to Canada, and the Danish West Indies to the United States of America. These are the pessimists. On the other hand, one may find here and there the dreamers who behold through the mists of the future the dawning of a glorious and resplendent United Scandinavia. We are inclined to share neither of these views; but, believing in the inherent patriotism and vitality and common sense of the race, and confident that the strong spirit of the Vikings is not yet dead,

we see no reason why, when the difficult shallows of the immediate future have been negotiated, the Danes should not once more become the great power in the North to which they are entitled by their geographical position, their history and their national character.

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